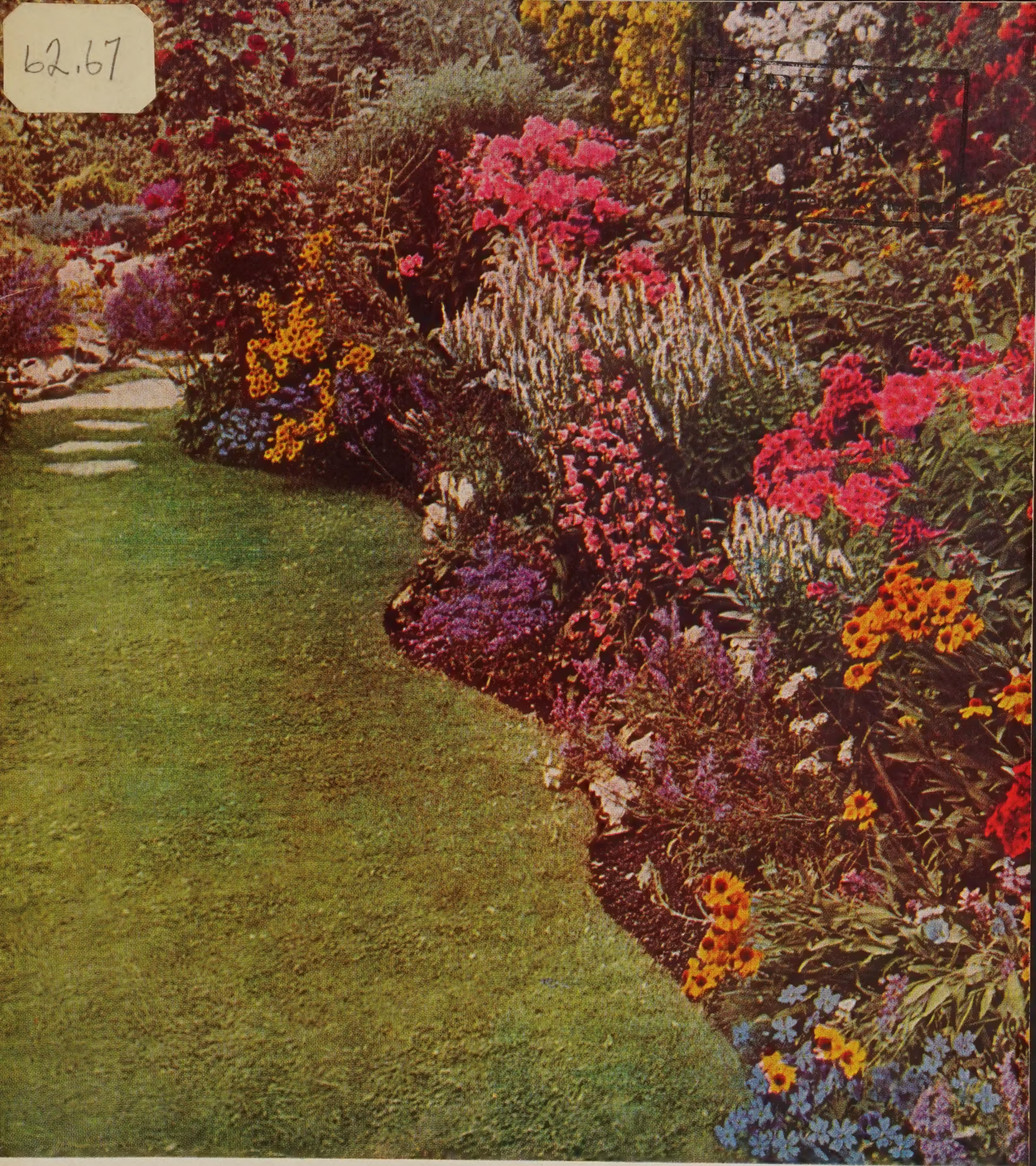


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scientific knowledge, policies, or practices.

62.67



McCullough's



1948

GARDEN
BOOK

McCullough's LAWN GRASS MIXTURE



You too...
can have a beautiful lawn!

START YOUR LAWN THIS WAY

Be sure the soil has good drainage. Have the seed bed fine, smooth and mellow. Careful consideration should be given as to the kind of seed to be used. The cost of the seed represents the smallest part of the investment. It is false economy to save a few cents by purchasing a lawn seed from a questionable source, only to be annoyed later by repatching a weedy turf or being required to do the entire work over.

Select a calm day and sow half the quantity one way and the remaining half at right angles. Seed at the rate of 1 pound to 200 square feet on new lawns or 125 to 150 pounds per acre. It requires about one-half as much seed for an established lawn. A thick sod is the best protection against weeds. The seed should be covered by light raking and a top dressing of peat moss or humus. The lawn is then ready for rolling. If watering is necessary, use a fine spray to prevent washing.

Acme Superfine LAWN SEED

As the name implies, this mixture is the finest that modern seed cleaning machinery can produce. Over 99.90 per cent free from weeds. It contains only the plump seeds which produce the strong healthy plants. It is a scientific combination of extra heavy Kentucky Blue Grass, Fancy Red Top and Creeping Bent. All deep-rooted permanent grasses, free from any of the coarse grasses. Truly the best lawn seed obtainable.

1 lb., 95c; 3 lbs., \$2.75; 5 lbs., \$4.50; 10 lbs., \$9.00; 25 lbs., \$20.00.

Emerald LAWN SEED

Our standard mixture that has proven satisfactory to our customers over a period of many years. Produces a good clean permanent turf. Composed of re-cleaned Kentucky Blue Grass, Fancy Red Top, Creeping Red Fescue, White Clover and other fine grasses all carefully blended.

Emerald will give satisfaction. 1 lb., 80c; 3 lbs., \$2.30; 5 lbs., \$3.75; 10 lbs., \$7.50; 20 lbs., \$13.50.



QUEEN CITY LAWN SEED. This reliable, time-tested mixture is composed of Blue Grass, Red Top, Rye Grass and White Clover. It can be depended on to produce a beautiful and permanent lawn. Per lb., 60c; 3 lbs., \$1.75; 5 lbs., \$2.85; 10 lbs., \$5.70; 20 lbs., \$9.60.

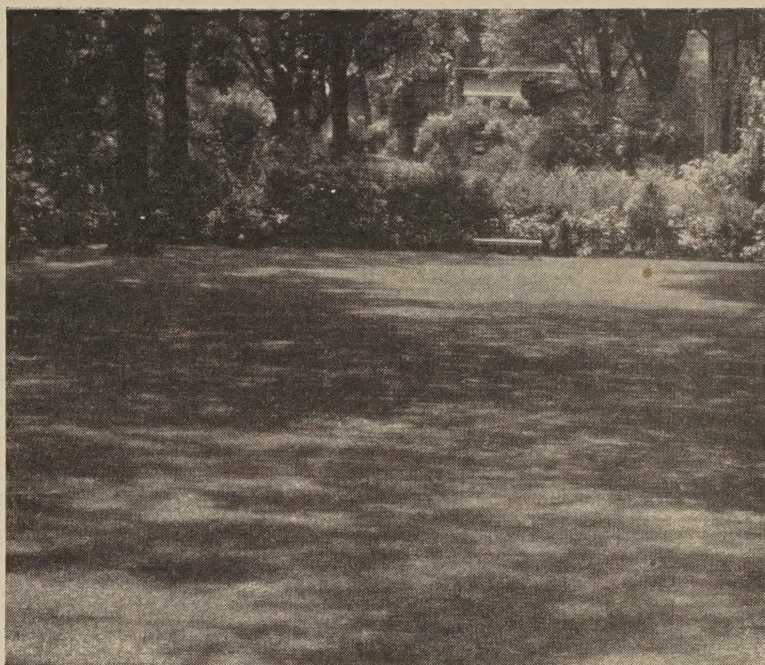
SHADY NOOK LAWN SEED. Many beautiful lawns are marred by bare spots under trees, shrubbery, and near buildings. Shady Nook is composed of an excellent selection of fine grasses that will withstand such conditions better than those in our other mixtures. It is important that soil fertility and moisture supply is well provided in places getting but little sunshine. Per lb., 85c; 3 lbs., \$2.45; 5 lbs., \$4.00; 10 lbs., \$8.00; 25 lbs., \$17.75.

TERRACE LAWN SEED. For high, dry situations where moisture and poor soil are conditions to be contended with. It is composed of grasses that should succeed under these conditions and produce a good turf. Per lb., 80c; 3 lbs., \$2.30; 5 lbs., \$3.75; 10 lbs., \$7.50; 20 lbs., \$13.50.

KENTUCKY BLUE GRASS (*Poa pratensis*). A most valuable grass for lawn and permanent pasture on good soils without alkaline reaction. For lawns, it is best combined with other grasses which develop more rapidly, as Blue Grass takes several seasons to establish. Per lb., 65c; 3 lbs., \$1.90; 5 lbs., \$3.10; 10 lbs., \$6.00; 20 lbs., \$10.50; 25 lbs., \$13.10.

WHITE DUTCH CLOVER (*Trifolium repens*.) A valuable creeping legume for use in lawn and pasture mixtures, or sown as a straight crop.

**LAWN
FERTILIZERS,
SEE PAGE 54**



**McCULLOUGH'S LAWN SEED MIXTURES
DELIVERED TRANSPORTATION PREPAID**

Mc Cullough's Quality Grasses

For Pasture, Hay, Turf, for all Soils and Purposes

ASTORIA BENT, RHODE ISLAND BENT, COLONIAL BENT (*Agrostis tenuis*). An excellent all-round Bent for lawns, greens, parks and playing fields; grows on wide range of soils; spreads mainly by underground root stalks or rhizomes, making a deep reinforced sod. It seldom produces many stolons or surface runners, thus lessening the amount of top dressing and watering. Sow about 3 lbs. to 1000 square feet.

SEASIDE OR COOS COUNTY BENT (*Agrostis maritima*). A superlative Bent for putting greens and lawns, ranked high by U. S. Golf Association for putting surface, producing a luxuriant matted growth. It is one of the most vigorous stoloniferous creepers although this characteristic does not usually show up till the second year, after which it makes a fine turf of uniform color and texture. Sow about 3 lbs. to 1000 sq. ft.

BENT, VELVET (*Agrostis canina*). Raritan strain is disease resistant and makes a beautiful turf of extra fine texture. Pale green in color.

BERMUDA (*Cynodon dactylon*). 35 lbs. per bushel. A vigorous creeper used principally in the South. Can also be used as an annual grass in the North.

BLUE GRASS, CANADIAN (*Poa compressa*). 14 lbs. per bu. For general use, inferior to Kentucky Blue Grass. Superior in dry, shady or impoverished soils and banks. It does not make a good turf alone as it produces a large amount of stems and comparatively little foliage. Good upland pasture grass.

POA TRIVIALIS (Rough-Stalked Meadow). 14 lbs. per bushel. This grass is known as "The Blue Grass of the Shade," being particularly adapted for shady places. Same family and characteristics as Blue Grass. Makes exceptionally attractive, bright green turf. For lawns sow 5 lbs. per 1000 sq. ft.

FESCUE, CHEWINGS (*Festuca rubra* var. *fallax*). 24 lbs. per bu. This fine-leaved grass produces a bright green turf, especially well adapted for tree shade, on account of its drought resistance. Sow 5 lbs. per 1000 sq. ft.

FESCUE, CREEPING RED (*Festuca Rubra* L.). 24 lbs. per bu. A creeping turf-forming grass, ideal for use on lawns, golf courses, airports, and permanent pastures.

Thrives on all types of soil, even on dry, sandy bottom land. Forms a thick turf, crowding weeds out and a real dandelion fighter. Color deep green, with fine needle-like leaves and a strong creeping root system. Especially valuable in shady places. Recovers quickly from drought; keeps its color the year around and does not winter-kill even in the Canadian Northwest. Sow 5 lbs. per 1000 sq. ft.

FESCUE, ALTA (*Festuca elatior*). 30 lbs. per bu. An improved strain of tall Fescue, deep-rooted, hardy perennial that is adapted to a wide variety of soils and climate. In addition to its forage value, is excellent for airport and athletic turf. Seed for pasture 14 to 18 lbs. and turf at 30 to 40 lbs. per acre.

FESCUE, KY 31 (*Festuca elatior*). a local strain of tall Fescue having very similar characteristics to Alta Fescue.

FESCUE, MEADOW or ENGLISH BLUE (*Festuca elatior*). 24 lbs. per bu. Sometimes known as Evergreen Grass. Used largely for permanent pasture. 24 lbs. per acre required if sown alone, or in mixtures, 12 to 18 lbs.

KENT WILD WHITE CLOVER. 60 lbs. per bu. A dwarf variety of White Clover, very hardy and excellent for permanent pasture, sown alone or broadcast on old meadows. 3 to 5 lbs. per acre.

ORCHARD GRASS (*Dactylis glomerata*). 14 lbs. per bu. Particularly suited to upland, loamy or moderately stiff soil. It ripens three weeks ahead of Timothy and is excellent to sow with Red Clover. Usually yields two crops and is one of the most valuable grasses for both pasturage and hay. Requires 1½ to 2 bus. per acre; if with Red Clover, 1 to 1½ bus. of Orchard Grass to 5 or 6 lbs. of Red Clover. For seed, the same quantity of Red Clover and ¼ of a bu. of Orchard Grass.

CRESTED WHEAT GRASS (*Agropyron cristatum*). 24 lbs. per bu. A hardy drought-resistant Northwestern prairie grass, adapted in Central States area mainly for controlling erosion on banks and dry slopes. Once established it develops a deep, firm turf. Can be sown in spring or fall, 50 lbs. per acre.

RED TOP, FANCY RECLEANED (*Agrostis alba*). 30 lbs. per bu. Sometimes called Herds Grass. Used as one of the principal

ingredients in lawn seed mixtures. Also splendid for pasture, making a fair hay crop. Best suited to moist rich soil, although does well on poor soil. Excellent when sown with Timothy, both maturing together. Requires 6 to 8 lbs. alone, or 3 to 4 lbs. to acre in mixtures. For lawns 4 lbs. per 1000 sq. ft.

RED TOP, ORDINARY or UNHULLED (*Agrostis alba*). 14 lbs. per bu. Sow at the rate of 30 lbs. per acre. See Fancy Red Top.

RYE GRASS, DOMESTIC. 24 lbs. per bu. Also known as Western Rye Grass. It is inclined to be a quick-growing annual, valuable in lawn mixtures as a nurse crop; succeeds well on almost any type of soil. Valuable in south central states for winter pasture. Sow 20 lbs. per acre.

RYE GRASS, PERENNIAL (*Lolium perenne*). 24 lbs. per bu. Often called English Rye Grass. A quick growing grass which is most suitable for mixtures, pastures, hay and lawns. Succeeds well on almost any soil not water sogged and affords good, quick nutritious grazing. If alone, requires 1½ bus. per acre. In mixture, from 2 to 3 pecks per acre.

TALL MEADOW OAT GRASS (*Arrhenatherum elatius*). 11 lbs. per bu. A very fine grass which is suitable for upland soils and especially valuable for mixture with Orchard Grass. It ripens about the same time and forms a better sod. Cut when in bloom it is very nutritious and it affords wonderful amount of pasturage. Requires alone 1½ to 2 bus. per acre; in mixture from ½ to ¾ bu.

TIMOTHY (*Phleum pratense*). 45 lbs. per bu. It is the most desirable of all grasses for hay but should not be grazed as the tramping of cattle hoofs causes it to die. In this section Timothy is best suited to low, flat or alluvial soils where there is a fair amount of moisture, but does not grow well in water-sogged soil. Requires alone, 1 peck per acre; if with Clover, 8 lbs. Timothy and 5 to 6 lbs. of Clover.

PRICES ON ALL GRASS SEEDS
Are subject to market changes. We will be pleased to quote firm prices on request. Orders entrusted to us will be filled at the lowest price on the day received.

Home Gardener's Planting Table

To simplify the planning of your vegetable garden and so that you may have your seed requirements on hand in early season, we have prepared the following vegetable planting table. The dates given are approximate as weather conditions vary from year to year. We hope you will find this chart helpful.

Vegetable	Time to Plant			Seeds, Plants Required Per 100 Feet of Row	Planting Distances For Hand Cultivation		Depth of Planting Seed in Inches	Ready for Use After Planting Days	
	Indoor Sowing	Outdoor Sowing			Rows Apart in Inches	Plants Apart in Inches			
		From	To						
Asparagus		March 15		60-80	24-30	15-20	8-10	3 yrs.	
Beans, Bush		April 15	August 15	1 lb.	18-24	4-6	½-2	45-65	
Beans, Bush Lima		May 1	August 1	½ lb.	24	10	1	60-75	
Beans, Pole		May 1	July 20	½ lb.	36-48	38-48B	1-2	45-65	
Beans, Pole Lima		May 1	July 15	½ lb.	36-48	38-48B	1-2	45-65	
Beets		April 1	August 15	1 ½ ozs.	12-18	2-3	1	50-120	
Broccoli		April 15	June 15	1 pkt.	30	24		60	
Cabbage and Brussels Sprouts	{ Early Late Chinese	March 1	April 10	July 20	¼ oz.	24-30	15-18	½	90-120
		March 1	April 20	July 15	¼ oz.	24-30	24-30	½	100-135
			July 1		¼ oz.	24-30	18-20	½	70
Carrots		April 15	August 1	½ oz.	12-18	2-3	½	60-120	
Cauliflower		April 15		¼ oz.	24-30	18-24	½	100-120	
Celery		March 15		¼ oz.	18-36	4-8	⅛	120-150	
Chard, Swiss		April 1	August 15	1 oz.	18-24	6-8	1	50-120	
Corn	{ Early Late	March 15	April 15	July 10	¼ lb.	30-36	12-18	1-2	75-90
			May 1	July 1	¼ lb.	30-36	12-18	1-2	80-90
			May 1	August 15	½ oz.	48-72	48-72B	1	90-130
Cucumber		March 15	May 15	1/3 oz.	24-30	18-24	½-1	150-160	
Eggplant		April 10	August 15	1 oz.	12-18	8-12	½-1	60-90	
Endive		April 1		70 rts.	24-30	14-20	3-4	120-140	
Horseradish (A)		May 1	October 1	¼ oz.	18-24	12-24	½-1	90-100	
Kale		April 10	August 15	¼ oz.	15-18	4-8	½	60-90	
Kohl-rabi		March 15	August 15	½ oz.	12-18	4-12	½	60-90	
Lettuce		May 1		½ oz.	60-72	60-72B	1	90-120	
Melon, Musk		May 1		1 oz.	84-108	84-108B	1	110-140	
Melon, Water		May 1	July 1	1 oz.	24-36	18-24	1	90-140	
Okra		March 1	March 15	1 oz.	12-18	2-3	½-1	140-160	
Onion Seed		March 1	July 1	2 qts.	12-18	2-3	1	45-75	
Onion Sets		April 1	July 1	¼ oz.	12-18	3-6	⅛	90-100	
Parsley		April 1	June 15	½ oz.	18-24	3-5	½-1	140-160	
Parsnip		March 1	August 15	2 lbs.	24-36	1-2	2	60-75	
Peas		March 15	May 1	June 15	⅛ oz.	18-24	15-20	¼	140-150
Pepper		May 1	July 15	½ oz.	84-108	84-108B	1	90-120	
Pumpkin		April 1	Sept. 15	1 oz.	12-18	1-2	½-1	30-65	
Radish		March 1		33	36-60	36	2-3	365	
Rhubarb Plants (A)		March 15	July 1	½ oz.	18-24	6-8	½-1	60-75	
Rutabaga		April 1		1 oz.	18-24	2-4	½-1	140-160	
Salsify		March 15	Sept. 1	1 oz.	12-18	1 ½-2	1	60-80	
Spinach		May 1	July 15	½ oz.	36-48	36-48B	1	60-65	
Squash	{ Summer Winter	March 1	May 1	July 1	½ oz.	84-120	84	1	125-140
		May 1	June 15		⅛ oz.	36-48	24-48	½-1	150-170
Tomato		March 15	Sept. 1	½ oz.	12-24	2-4	¼-½	60-75	
Turnip									

(A) Use plants.

(B) Plant in hills

NUMBER OF PLANTS TO THE ACRE

Distance Apart	Number of Plants	Distance Apart	Number of Plants
1 foot by 1 foot	43,560	6 feet by 6 feet	1,210
1 1/2 feet by 1 1/2 feet	19,360	8 feet by 8 feet	680
2 feet by 1 foot	21,780	10 feet by 10 feet	435
2 feet by 2 feet	10,890	12 feet by 12 feet	302
2 1/2 feet by 2 1/2 feet	6,960	15 feet by 15 feet	193
3 feet by 2 feet	7,600	18 feet by 18 feet	134
3 feet by 3 feet	4,840	20 feet by 20 feet	109
4 feet by 4 feet	2,722	25 feet by 25 feet	70
5 feet by 4 feet	2,178	30 feet by 30 feet	48
5 feet by 5 feet	1,742		

NUMBER OF PLANTS PRODUCED FROM AN OUNCE OF SEED

Asparagus	About 300	Celery	About 3,000	Lettuce	About 3,000
Broccoli	About 2,000	Eggplant	About 1,000	Pepper	About 2,000
Cabbage	About 2,000	Endive	About 3,000	Tomato	About 3,000
Cauliflower	About 3,000	Kale	About 2,000		

HAVE FRESH VEGETABLES AT YOUR KITCHEN DOOR



FREEDOM GARDENS TO CUT AMERICA'S HIGH COST OF FOOD. THE VICTORY GARDEN OF THE WAR YEARS IS A FREEDOM GARDEN TODAY.

During the bleak war years, many of us, through necessity, planted a garden for our own use. We then learned, for possibly the first time, to enjoy fresh vegetables from our own kitchen gardens, besides learning the pleasures connected with producing something with our own hands.

With the end of the war, some thought that the costs of living would decline and that it would be much simpler to purchase their food needs. To those of us who kept our gardens going at full speed ahead, we have the satisfaction of looking back and finding we did

not make that mistake and that instead of prices declining, they are advancing and are still doing so.

We, in America, are very fortunate in being one of the few countries in the world today, who are having three square meals a day. It was only through the help of all-out gardening that this is still possible. An adequate food supply is important. Anticipation of large food surpluses should not lead to the abandonment of a garden, or in other words, the abandonment of food security.

Grow what you eat—eat what you can—and—can the surplus!

ASPARAGUS

One ounce of seed will sow 75 feet of row and produce about 300 plants. **From Seeds** Sow seed as early as possible in the spring. The plants should be set in the permanent bed when one or two years old.

Fresh Dug Asparagus Roots Roots can be set from February to May, or in the fall, in October or November. 100 roots plant a bed 100 feet long and are sufficient for a medium garden. An acre requires 4000 to 7000 roots.

GROWING ASPARAGUS. It is only necessary to set out the roots on good soil and give them ordinary care to keep weeds down, etc. No special preparation of the land is necessary. It should be plowed or spaded deep and worked down well, and should be enriched by applying a heavy dressing of manure, which should be plowed or spaded in. The roots are set out 18 to 24 inches apart in rows about 4 feet apart. 100 roots make a good bed, but more should be set out for a large family.

Cutting may commence the third year after setting out the roots. A small cutting may be made the second year if not continued more than two weeks.

1. WASHINGTON—The Best Variety. This variety has proven as nearly rust-proof as is possible to produce Asparagus. It is much in demand on account of its heavy yield and fine flavor. The stalks are rich, dark green color, tinted darker at tips. Pkt., 10c; oz., 20c.

PARADISE ASPARAGUS. Growers who have seen this Asparagus growing have been amazed to see the straight, crisp, large stalks that were produced from plants set only the year before. An exceptionally strong, vigorous producer. Some growers say it produces twice the crop of ordinary Asparagus. Only six to eight stalks needed to make a pound. This variety is every bit as rust-resistant as the variety Martha Washington. Has an unusually pleasant, milder flavor than ordinary Asparagus and is preferred by most who taste it. **2-year roots, 25 for \$1.35; 100 for \$3.75, postpaid.**

WASHINGTON. This variety has proven as nearly rust-proof as is possible to produce Asparagus. It is much in demand on account of its heavy yield and fine flavor. The stalks are rich, dark green color, tinted darker at tips. **2-year roots, 25 for \$1.25; 100 for \$3.25, postpaid.**

BEANS Dwarf or Bush Varieties

If planted every two or three weeks, commencing after all danger of frost has passed and continuing until about August 15th, a supply will be kept up during the whole summer.

One pound plants about 100 feet. An acre requires 1 to 1½ bushels. Half pound planted every three weeks is sufficient for a medium garden. They are ready for table from 45 to 65 days after planting.

Culture. For field culture plant in rows 2½ feet apart, dropping the Beans 3 to 4 inches apart in the rows, covering about 2 inches with soil. In small gardens, rows may be 18 inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, and do not disturb the roots, especially after blooming, as they will blight and the crop will be reduced. Constant picking extends bearing.

Insect Remedies—For Mexican Bean Beetle, dust the under side of leaves with Rotenone. See page 57.

For fungous diseases and rust, spray with Bordeaux Mixture or Dupont Garden Dust. See pages 56 and 58.

Green Podded Beans

2 SUPERGREEN. (Bronze Medal Winner 1948 All-America Selections.) (58 days.) Supergreen is a medium or slightly late variety, about 15 inches high, with extremely heavy-yielding capacity. Pods are long, slim, round, stringless and of high quality. It is mosaic-resistant. Very similar to Tendergreen but greatly improved.

Pkt., 25c; ½ lb., 40c; 1 lb., 75c; 5 lbs., \$3.50.

3 TENDERGREEN. (53 days.) Stringless. One of the very best of the round, green-podded Beans. Fleshy pods about 6 inches long, strictly stringless and of fine quality. Very productive and closely resembles an improved Full Measure Bean.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

4 STRINGLESS RED VALENTINE. (52 days.) Similar to Improved Earliest Red Valentine except the pods are stringless.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

5 STRINGLESS GREEN POD. F. (50 days.) A very handsome long, cylindrical, green Bean. Pods larger than those of Valentine and straighter. Very fleshy and remain crisp and tender longer. Bush of vigorous growth and productiveness. A very desirable sort for home gardens and largely grown for market.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

6 GIANT STRINGLESS GREEN POD. F. (53 days.) A highly productive and very handsome sort. Vines vigorous, spreading. Pods large, round, averaging larger and straighter than the Stringless Green Pod, but a few days later.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

7 DWARF HORTICULTURAL. (52 days.) Very popular in most localities, especially for market, as they are valuable both for snap Beans and shelling. They become fit for use as shelled Beans early, and in this condition the Beans are large, easily shelled and equal to Lima Beans in quality. The vines are very productive, compact and upright in growth, with large leaves. The pods are 5 to 5½ inches long, broad, thick, curved and have splashes of bright red on yellowish green.

Pkt., 20c; ½ lb., 40c; 1 lb., 75c; 5 lbs., \$3.50.

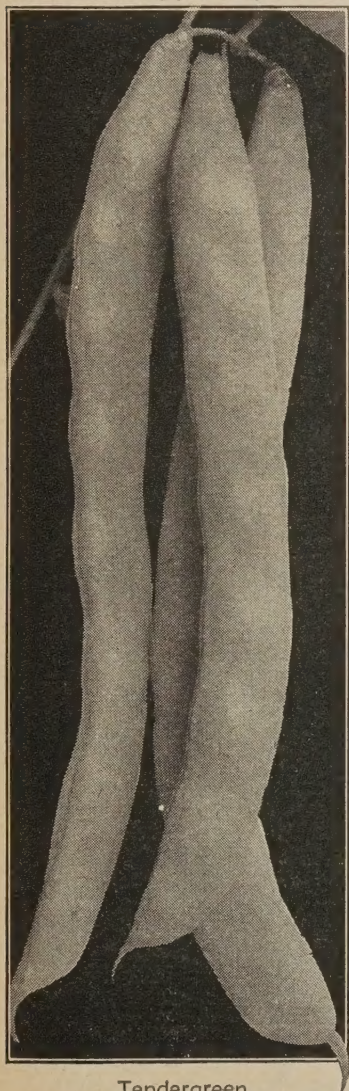
8 FULL MEASURE. F. (53 days.) A very desirable round-podded variety with pods about 6½ inches long, which are solid, meaty, brittle and stringless. It is a little later than Stringless Green Pod and is a splendid Bean for home or market use.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

9 TENNESSEE GREEN POD. (49 days.) A dwarf, early snap Bean, very hardy and more capable of withstanding inclement weather than most other sorts. The vines are large, somewhat spreading, prolific. The pods are very long (often 6 to 7 inches) flat, irregular in shape, of dark and vivid green color.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs. \$2.25.

BEANS, DWARF BUSH VARIETIES—
Continued next page.



Tendergreen

WHEN ORDERING, SEE PAGE 64 OF THIS CATALOG

BEANS Dwarf or Bush Varieties—Continued

10 BOUNTIFUL. (48 days.) An improved long Yellow Six Weeks; earlier, very much larger and more tender. It is very hardy, extremely early, prolific, and bears continuously for several weeks. Pods are flat, absolutely stringless, rich green, large and handsome. For very early or very late planting it is desirable for both home garden and market.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

11 HOPKINS RED VALENTINE. (52 days.) A well known, very early sort. Pods of medium length, about 4½ inches long, of medium green color, curved, cylindrical with crease in the back; very fleshy, crisp and tender. Vines medium to large.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

12 SULPHUR or BRIMSTONE. (55 days.) Has a distinct flavor that is highly esteemed by gardeners in the mountain sections. Not stringless but

a good bearer and remains tender till the pods are quite far advanced.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

13 REFUGEE STRINGLESS GREEN POD. (68 days.) A stringless Bean having the many excellent qualities of Late Refugee or 1000 to 1. As hardy and productive as the old Late Refugee; seed same color, and retaining all the good qualities of that sort. Vine 15 to 18 inches tall. Pods 5½ inches long, round, meaty, slightly curved and containing 5 or 6 beans.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

INOCULATION FOR BEANS. Increase your yields of Beans by treating the seeds before planting with NITRAGIN INOCULATOR. Easily done. We have it in convenient size for small gardens. (See page 50.)

DWARF WAX BEANS

14 PENCIL POD BLACK WAX. F. (54 days.) One of the most popular varieties for home use and market. The pods are about 4½ inches long, slightly curved, round, very brittle and tender. They are very fleshy, clear golden yellow and remain tender a long time.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

15 IMPROVED GOLDEN WAX. (50 days.) An early maturing variety, very productive. Vines erect, compact, bearing pods well off the ground. Pods nearly straight, broad, flat, golden yellow, very fleshy and waxlike, usually 4½ to 5 inches long. A good sort for home garden, either for table use or pickling.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

Beans - Field Varieties

Culture. Plant in rows about 2½ ft. apart. Require about ½ bushel per acre. Other sorts about a bushel.

16 GREAT NORTHERN. (90 days.) Beans medium large, long, flattened oval, white. Bush 11 to 15 inches tall, spreading with partial vining, dark green, prolific.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

17 DWARF WHITE KIDNEY. (100 days.) Large white, kidney-shaped, slightly flattened. Pods about 6 inches long, large and coarse. Beans excellent quality either green or dry.

Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.25.

18 DWARF WHITE NAVY. (95 days.) The well known small oval white variety so largely used in all sections.

Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

19 DWARF WHITE MARROW. (100 days.) Beans oval, about double as large as Navy. Vines vigorous and productive.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

20 DARK RED KIDNEY. (95 days.) Similar to above, but rich mahogany-red. Very salable.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

POLE or CORNFIELD BEANS

Culture. Pole beans are more sensitive to cold and wet than Dwarf varieties, hence should not be planted too early. Use poles from 6 to 8 feet long in rows 4 feet apart, placing the poles 3 feet apart in the row. If the poles are slanted slightly to the north, the vines climb better and the pods are more easily seen. In home gardens 3 poles are usually placed wigwam style and tied at the top. Around each pole plant 4 to 6 beans from 1 to 2 inches deep. When ready to run, thin to 4 plants and see that they all climb the same way, as if trained wrong they will not climb. If to be planted in corn, this should be done after the corn is well started and has had 2 or 3 workings.

An acre requires about 15 pounds of seed. One pound will plant 100 hills.

21 McCullough's Early White Half Runner (50 days)

The name of this Bean is strictly in keeping with the nature of the plant. It is exceptionally prolific. Vines are light green, 16 to 20 inches in height and have short runners. Pods light green, about 5½ inches in length, containing 5 to 8 Beans. Thoroughly stringless when young. Also excellent as a dry shell Bean; flavor equal to or better than Navy Beans.

Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.25.

22 IMPROVED KENTUCKY WONDER. F. (67 days.) A well known variety and one of the most popular of all pole beans, especially in the middle sections. The vines are very vigorous, heavy and very prolific, hence not desirable for planting in corn. Pods are of irregular shape, bright green, very long, often reaching 9 to 10 inches. They are very tender, crisp and stringless when young, but become irregular and spongy as the beans ripen.

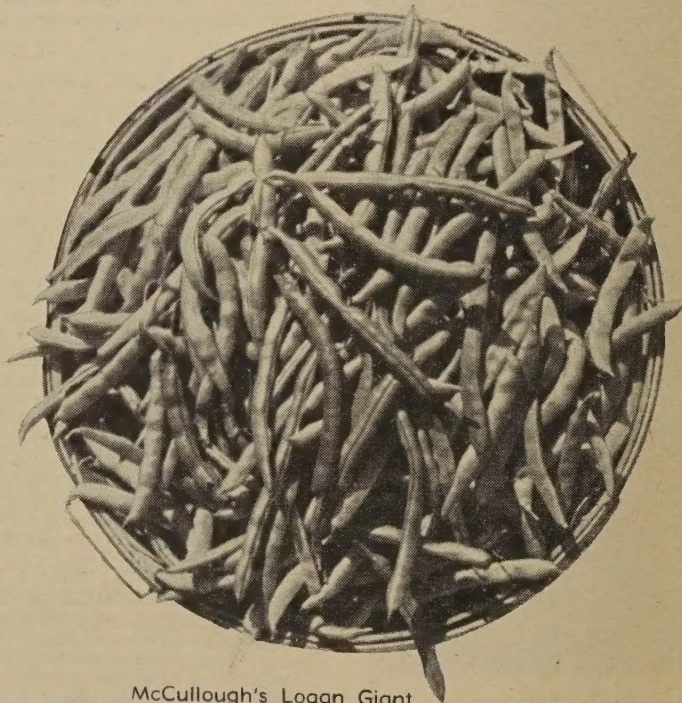
Pkt., 15c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

23 WHITE-SEEDED KENTUCKY WONDER. (64 days.) Similar to the above, excepting that the beans are different shape and solid white. It is early maturing, very desirable for snap beans and an excellent variety for green shelling and unsurpassed in quality as baked beans. Very profitable for market gardeners and highly praised in all sections.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

24 McCullough's Logan Giant (63 days.) If you want delicious, tender, fine flavored snap beans be sure to plant some McCullough's Logan Giants. There is no bean of its class that we have grown that is as tender and as fine quality. Many of our customers consider it the best pole bean they have ever grown. The pods, produced in clusters and in great abundance, are light green, 6 to 7 inches long, broad, round and slightly curved.

Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.



McCullough's Logan Giant

POLE OR CORNFIELD BEANS continued on next page.

POLE or CORNFIELD BEANS—Continued

25 RED SPECKLED CUT SHORT or CORN HILL. (74 days.)

A very popular variety, especially for planting among corn. It will give a good crop without the use of poles. The vines are not as heavy as Kentucky Wonder, being medium size, vigorous, twining loosely, with dark colored leaves. Pods are 3 to 3½ inches long, straight, flat, fleshy and of good quality. As they mature the pods become light yellow tinged with red, the beans showing distinctly through the pods. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

26 LONDON HORTICULTURAL or SPECKLED CRANBERRY. (72 days.)

A very popular variety for general purposes, either as a late green shelled bean or for snaps. The pods are of medium length, 4½ to 5 inches long, broad; when young, pale green, gradually changing to yellowish green striped or splashed with red. Vines are moderately vigorous, with large light colored leaves. Can be grown on corn or short poles. As shelled beans they equal Limas in flavor and are excellent to use as dry beans for boiling or baking. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

27 WHITE CREASEBACK. (65 days.)

An extremely early variety, which produces nearly all its pods at the same time. The vines are medium size and vigorous, and in rich soil wonderfully productive, bearing round, fleshy pods in clusters of from 4 to 12, which makes it extremely easy to gather. Pods are about 5 inches long, comparatively straight, attractive, light green, very fleshy, with a crease down the center. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

28 MISSOURI WONDER. (66 days.)

A green podded variety of high quality. The pods are nearly as long as those of Improved Ken-

tucky Wonder, but slightly broader and flatter and lighter in color. When in condition for snap beans, the pods are nearly stringless. Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.25.

29 STRIPED CORNFIELD. (71 days.)

A prolific green-podded variety. Pods straight, round, green at picking stage, and becoming mottled with purple later. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

30 SCOTIA or STRIPED CREASEBACK. (72 days.)

A hardy and very productive green-podded cornfield bean. The vines are sturdy and of good climbing habit with small, medium deep green leaves. The pods are long, about 6 inches, very cylindrical or completely rounded, distinctly creasebacked, very fleshy and of excellent quality. The color, when in condition for use as snaps, is light silvery green, becoming tinged with purple as the pods mature. Especially suitable for growing in corn for snaps. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

31 TENNESSEE WONDER or EGG HARBOR. (72 days.)

Large green pods, curved, tinged with purple and wrinkled, depressed between each of the 8 or 9 seeds. One of the earliest of all cultivated Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

32 LAZY WIFE. (74 days.)

A somewhat late maturing variety, bearing medium green pods in large clusters. Pods are 5½ to 6½ inches long, broad, thick, fleshy and entirely stringless. When young, they have a rich flavor which is retained until they are nearly ripe. An excellent sort for either snap green, shelling, or using as dry beans. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

Pole Beans—Wax Pod

34 OHIO WAX POLE. (67 days.) Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than bush variety, and keeps on producing until killed by frost. Pkt., 20c; ½ lb., 40c; 1 lb., 75c; 5 lbs., \$3.50.

LIMA BEANS—DWARF or BUSH

Culture. All Lima Beans are tender and the ground should be dry and the weather warm and settled before planting. They do best in good light soil, and if not rich, an application of sheep manure or other good fertilizer will be well repaid. Plant in drills, 1½ to 2 feet apart, dropping the beans 4 to 5 inches apart and covering about 2 inches deep. Cultivate often until they commence to flower, but only when the leaves are dry.

A pound of seed will plant about 150 feet of row; about 60 pounds per acre. For succession make two plantings four weeks apart.

35 BURPEE'S IMPROVED BUSH LIMA. (75 days.)

Pods and beans are both larger and thicker than Burpee's Bush Lima, and somewhat earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are most luscious. Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.25.

36 FORDHOOK BUSH LIMA. F. (75 days.)

A very vigorous and erect growing variety, bearing its pods well above the ground in large clusters. Pods are medium green, about 5 inches long and contain 4 to 5 large, thick Beans of exceptionally fine quality. We consider this one of the best of the large-seeded kinds. Pkt., 20c; ½ lb., 35c; 1 lb., 65c; 5 lbs., \$3.00.

37 FORDHOOK No. 242. F. (75 days.)

Developed by the U. S. Department of Agriculture. Plant as tall as regular Fordhook but with greater spreading habit. Pods slightly curved, with thinner walls than Fordhook, containing three or four light green beans of the finest type. Produces well under high temperatures. Pkt., 20c; ½ lb., 40c; 1 lb., 75c; 5 lbs., \$3.50.

38 HENDERSON'S BUSH LIMA. F. (65 days.)

An exceedingly productive variety of dwarf habit. Commences bearing very early and continues to grow and set pods until stopped by frost. The vines are without runners, somewhat dwarf, very productive. Beans small, white and of most excellent quality either for green shelling or as dry beans. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

39 JACKSON WONDER or CALICO BUSH LIMA (65 days.)

Also known as Florida Speckled Bush Butter Bean. This bean originated in the South where many gardeners prefer it to all other kinds, claiming that the flavor is superior, that it is the best bearer of them all, and that in dry seasons it is practically drought proof. About 2 feet high and carry quite a load of pods that contain 3 to 4 beans each. It begins bearing early and continues until killed by frost. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

MAMMOTH PODDED POLE LIMA BEANS

Large seeded sorts require 2 pounds to 100 poles, ¾ bushel to an acre. Small Limas require about one-third the quantity.

Culture. These are to be treated like other Pole Beans excepting they should be planted one or two weeks later. Where soil is very stiff, it is best to plant the Beans with the eye downward, as they will come up more rapidly.

41 Challenger (Fordhook Pole). (92 days.)

A large-seeded potato Lima, similar in pod and seed to Fordhook Bush Lima. Plant vigorous, good climber, very productive. Smooth, straight pods. Seed large, almost as wide as long. An abundance of these fine Limas can be grown in a comparatively small space. Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.25.

42 KING OF THE GARDEN. (88 days.)

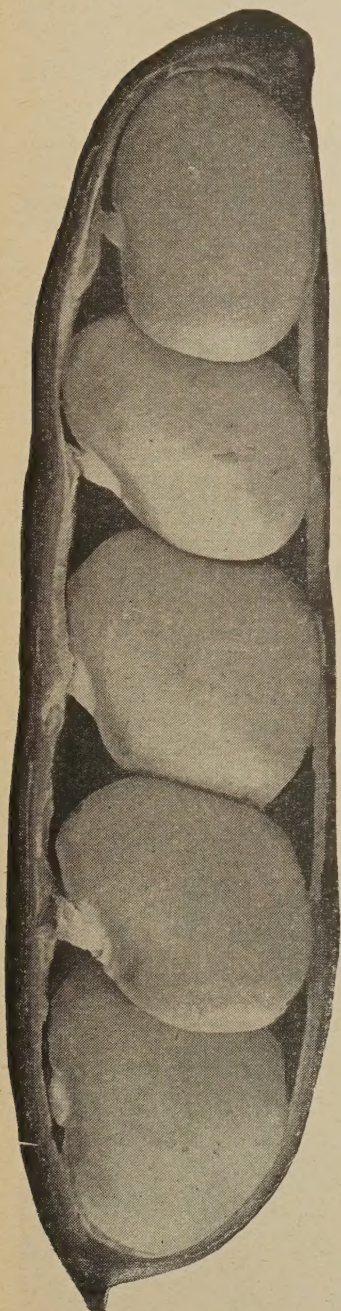
A favorite sort on account of its large size and abundant yield. Beans greenish color, very tender and delicious. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

44 SMALL LIMA or SIEVA. (77 days.)

Also called Butter or Carolina. Not as large as the other varieties but a good bearer and about 10 days earlier. Pkt., 20c; ½ lb., 35c; 1 lb., 60c; 5 lbs., \$2.75.

45 FLORIDA SPECKLED BUTTER BEAN (Calico Bean). (78 days.)

A sure cropper and like the small or Sieva except that they are speckled. Pkt., 20c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.



Challenger (Fordhook Pole)

TABLE BEETS

Beets fresh from the garden are always more tender and delicious than those that are shipped. They can be sown in succession for different seasons and if too many are produced for table use, make excellent food for poultry and stock.

Culture. A deep loamy or sandy soil is best suited to Beets. If wanted very early they can be sown in hotbeds and transplanted in the open ground when the weather has moderated, but the outer leaves should be trimmed off when transplanting is done. The earliest outdoor sowing is done in March or April, in rows 15 to 18 inches apart, thinning or transplanting the plants to 3 or 4 inches apart in the rows. For winter use, sow in June or July. Roots can be stored in pits or cellars, covering with sand to keep from wilting.

One ounce sows 60 feet of drill; six pounds 1 acre.



SWISS CHARD

46 EARLY WONDER. (52 days.) This is the best Beet for early use. The highest quality for the home garden.

Pkt., 10c; oz., 25c; ¼ lb., 85c.

47 CROSBY'S EGYPTIAN. (55 days.) An improved sort which is very popular with the market gardeners on account of its quick growth, extreme earliness, and general good qualities. The tops are small, roots flattened but slightly globe-shaped and very smooth. Exterior bright red and inside deep vermilion-red zoned with a lighter shade. It becomes fit for use earlier than any other variety and is much superior to some of the older sorts.

Pkt., 10c; oz., 25c; ¼ lb., 75c.

48 Detroit Dark Red (58 days.) Produces medium size globe-shaped roots which are very smooth and of bright red color. Very desirable for bunching. Comparison with other varieties proves that **Detroit Dark Red** is the most uniform Beet in size and most attractive in color.

Pkt., 10c; oz., 30c; ¼ lb., 90c.

A. S. T. A. GARDEN ASSORTMENT
FOR EUROPE

See Page 17

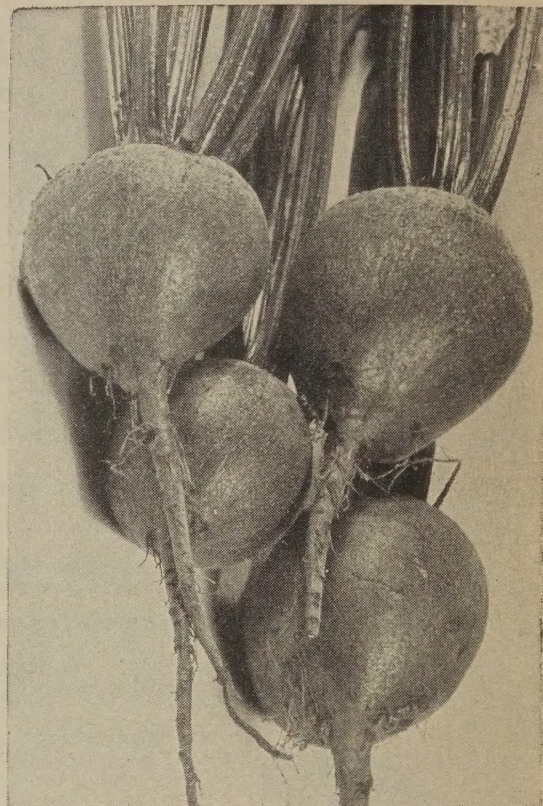
SWISS CHARD

55 LUCULLUS. (55 days.) This variety is grown for its leaves only, which are boiled like spinach. Sown in the spring the leaves are soon ready to eat and will continue to produce all summer and fall. Known also as Spinach Beet.

Pkt., 10c; oz., 25c; ¼ lb., 70c.

56 RHUBARB CHARD. (60 days.) A new Swiss Chard that looks like Rhubarb. The leaf stalks are bright but delicate, translucent crimson; the rich color extends out through the veins into the dark green, heavily crumpled leaves. You will enjoy its different, tasty, delicious flavor. Plants are so beautiful they may be used in flower borders. Leaves and stalks are nice in flower arrangements.

Pkt., 15c; oz., 45c; ¼ lb., \$1.35.



Norwood Blood Turnip Beet

51 EXTRA EARLY EGYPTIAN. (50 days.) It is the earliest sort and largely used for forcing. Has very small tops and produces flat, medium size roots which are very dark red, moderately thick and distinctly flat on the bottom. Flesh is dark purplish red, firm, crisp and tender.

Pkt., 10c; oz., 25c; ¼ lb., 75c.

53 EARLY BLOOD TURNIP. (60 days.) A selected stock of this old and very popular variety. It is of deep red color, zoned with lighter shade; roots round, slightly flattened and excellent for summer and autumn use.

Pkt., 10c; oz., 25c; ¼ lb., 85c.

PLANT A GARDEN

Food—Health—Thrift

Stock Beets or Mangels

Too little attention is paid to this important crop for winter feed for stock. They yield enormously, sometimes making 15 tons to the acre; are very nutritious, not only improving the general condition of stock, but greatly increase both the quantity and quality of milk in cows. A variety of feed is always beneficial to all animals and the Mangel-Wurzel and Sugar Beets afford one of the best crops for this purpose, as they are superior in feeding qualities to turnips and are a much larger yielding crop. All farmers and especially stock raisers should grow them extensively.

Culture. Sow in the latter part of April, May or June, at the rate of 5 pounds to the acre, in rows 2½ to 3 feet apart and thin to 8 inches apart. If seed is soaked 24 hours before sowing, it germinates more quickly but it should be put in when the ground is moist. The crop is harvested before frost and packed away in barns or cellars. They can also be put into piles or ridges 5 to 6 feet high and covered with straw or litter to keep from freezing too much. When the winter weather comes, throw on a layer of 4 to 6 inches of earth. A protection of boards to shed the heavy rains is also desirable.

57 MAMMOTH LONG RED MANGEL. (110 days.) Particularly suited to deep soils but succeeds on any medium or heavy soil. The roots are very large, uniform, and are enormously productive. Flesh is white, tinged with red. One of the best for general purposes.

Pkt., 10c; oz., 20c; ¼ lb., 60c; ½ lb., \$1.00.

58 GOLDEN TANKARD MANGEL. (95 days.) A variety which produces very large roots, oval shaped, the bottom being larger than the top. It is light grey above the ground; deep orange-yellow below, flesh yellow zoned with white. A splendid sort for shallow soil and produces enormously in rich ground.

Pkt., 10c; oz., 20c; ¼ lb., 60c; ½ lb., \$1.00.



Mangels

WHEN ORDERING, SEE PAGE 64 OF THIS CATALOG



Green Sprouting (Calabrese) Broccoli

Broccoli

60 GREEN SPROUTING (Calabrese). F. (60 days.) The truest heading strain. A packet will produce about 200 plants; an ounce about 2000. Broccoli is grown the same as cabbage or cauliflower. Simply sow the seed in the open ground in May and transplant the plants when large enough. Plant forms a large, solid head which remains green. When the central head is cut, numerous sprouts develop from the leaf axils, each sprout terminating in small, green heads. A popular delicacy for the entire family. **Pkt., 15c; ½ oz., 35c; oz., 60c.**

Brussels Sprouts

One ounce makes about 2000 plants. A vegetable of the cabbage family which is largely used in the fall. It should be more largely grown in home gardens. It produces stalks about 2 feet high, which are covered with small heads resembling miniature cabbage. These are cooked and served like cabbage and are very tender and delicious.

Culture. Same as for late cabbage, but plants are set closer together.

61 LONG ISLAND IMPROVED. F. (90 days.) A semi-dwarf variety and one of the best. **Pkt., 15c; ½ oz., 50c; oz., 85c.**

CABBAGE CHOICE SELECTED STOCKS

Culture. For earliest plants the seed is sown in hotbeds from January to March. To make the best plants, sow early and transplant to cold frames. Then at the end of March or the first of April transplant to the garden.

One ounce makes about 2000 plants.

Four ounces make plants enough for one acre.

The number of days indicated give relative period of maturity from setting of plants.

Yellows-Resistant Cabbage Seed

Varieties listed below are the result of special breeding against Yellows or Wilt Disease, an infection frequently attributed to hot or dry weather. Our stock seed is selected rigidly and continuously for type and resistance. We offer only **first generation** seed from such stock.

62 WISCONSIN ALL SEASONS. (90 days.) Recommended for "yellows" sick soil where the flatter type of domestic cabbage is wanted for kraut, etc. A uniform stock producing large crops and very highly resistant. **Pkt., 15c; ½ oz., 30c; oz., 50c.**

63 WISCONSIN GOLDEN ACRE Yellows Resistant. (64 days.) True to type and earliness and in addition will produce good crops on "yellows" sick soil where regular Golden Acre cannot do well. **Pkt., 15c; ½ oz., 40c; oz., 70c.**

64 MARION MARKET. (75 days.) Highly resistant to yellows; round head, short stem, will permit close planting. Earliest of all yellows-resistant varieties selected from Copenhagen Market. **Pkt., 15c; ½ oz., 30c; oz., 50c.**

65 WISCONSIN HOLLANDER. (100 days.) This is a strain of Hollander or Danish Ballhead. A heavy yielding, round head, deep green, with a purple or bluish tint on the edges. **Pkt., 15c; ½ oz., 30c; oz., 50c.**

Early Varieties

66 GOLDEN ACRE. (64 days.) This is an early, round-headed Cabbage which closely resembles Copenhagen Market in type. As its name implies, it is a money-maker. It is earlier than Copenhagen Market but is smaller and can be planted closer. Because of its earliness and fine quality, it commands a higher price than any round-headed Cabbage. **Pkt., 10c; ½ oz., 30c; oz., 50c.**

67 EARLY JERSEY WAKEFIELD. (66 days.) One of the earliest and by far the surest heading of first early Cabbages. Most gardeners depend upon it entirely for their extra early crop. It is exceedingly hardy, resists cold and unfavorable conditions and is the most likely to yield satisfactory results. Plants are compact, with erect conical heads and few outer leaves. Stems short; heads of medium size, very solid and of excellent quality. **Pkt., 10c; ½ oz., 30c; oz., 50c.**

69 COPENHAGEN MARKET. (68 days.) The heads are exceptionally large and it has a very short stem and few outer leaves—a most excellent sort for home gardens and market gardeners. On account of extreme earliness, it is destined to become one of the leading sorts grown, as a flat Cabbage fills barrels or crates faster than sharp head Cabbage and will yield the grower more returns. **Pkt., 10c; ½ oz., 35c; oz., 60c.**

Medium Early Varieties

73 EARLY DWARF FLAT DUTCH. (84 days.) A variety which has long been popular among growers, both for home use and markets. The heads are borne on short stems and are very large, solid, and nearly flat on top. Practically every plant will form a good, solid head which will mature earlier than Late Flat Dutch. **Pkt., 10c; ½ oz., 30c; oz., 50c.**

Main Crop Varieties

77 PREMIUM LATE FLAT DUTCH. (105 days.) A very superior strain of this well-known, popular Cabbage which is exceptionally reliable for main crop planting. It is short stemmed; has rather large, early leaves, and produces uniformly large, flat, deep, solid heads of splendid quality. It is an excellent keeper and can be relied upon as thoroughly satisfactory. **Pkt., 10c; ½ oz., 30c; oz., 50c.**

79 DANISH BALLHEAD. (95 days.) It produces very large, solid heads, which are globular in shape, has few but rather large, thick, bluish green leaves. Heads are borne on short stems, are of medium size, round, very solid, and stand shipment better than any other late sort. One of the very best keepers and much desired for kraut. **Pkt., 10c; ½ oz., 35c; oz., 60c.**

81 PERFECTION DRUMHEAD SAVOY. (90 days.) Too little attention is paid to the Savoy Cabbages. It is used almost entirely for late planting and attains its greatest perfection in flavor after frost, when it becomes as tender and even more delicious than cauliflower. The heads are of medium size, borne on short stems, and not as large as the ordinary late Cabbage, hence will stand closer planting. Our stock of this is American grown and will produce uniformly large heads for this variety. We strongly recommend it to be more extensively grown both for home use and market. **Pkt., 10c; ½ oz., 30c; oz., 50c.**

Red Cabbage

82 MAMMOTH RED ROCK. (90 days.) A variety used mainly for pickles and sauerkraut. It is highly esteemed. **Pkt., 10c; ½ oz., 35c; oz., 60c.**

Chinese Cabbage

Also called "Celery Cabbage."

An ounce of seed will sow 40 to 50 feet of row.

This vegetable of the cabbage family has become extremely popular. The large mid-ribs of the leaves are perfectly white and very crisp and tender. It is excellent when used as a salad, being of a very delicate flavor slightly resembling raw cabbage but more delicious. It is so easily raised that everyone who has a garden should enjoy it.

The seed should be sown not earlier than the first of July in rows 2½ feet apart, and the plants thinned 18 to 20 inches apart in the rows. If sown early it soon runs to seed and is useless.

83 CHIHLI. (70 days.) This is the earliest variety of Chinese Cabbage and heads more evenly than any other kind. The heads are pointed, very firm, and when matured are often 18 inches long, blanched pure white inside and are of very fine quality. Chihli is rapidly superseding the older varieties, as the attractive heads sell readily, making this a very profitable crop to grow. Our strain of Chihli is very uniform. **Pkt., 10c; ½ oz., 30c; oz., 50c.**



Chihli Chinese Cabbage
Grown by Fred Meyer—Madisonville,
Cincinnati, Ohio

Vegetable Plants

Broccoli
Brussels Sprouts
Cabbage
Cauliflower
Celery
Pepper
Tomato
Sweet Potato

We carry a full line of the above in leading varieties in season. We do not send these plants by mail.

THE BEST TABLE CARROTS

Carrots have become a very popular vegetable from the consumer's standpoint, since nutrition specialists have pointed out their value in the human diet. They add flavor to soups and meats, besides being healthful, delicious and to an extent ornamental, and should be more largely used. In addition to their table uses, they are a nutritious food for all kinds of stock and poultry.

Culture. Carrots do best in rich, light loamy soil, and where the soil is shallow or stiff, select the short growing varieties, rather than the longest rooted sorts. For early crop sow in March; for main crop in April or May, in rows 18 inches apart, cultivating and weeding as soon as the plants are up. Continue in cultivation until maturity. Cover the seed half an inch deep and see that the soil is pressed firmly, thin to 4 to 6 inches apart. One ounce sows 300 feet of row; 2 lbs. per acre.

87 NANTES IMPROVED CORELESS. F. (68 days.) Because of its fine quality, this variety is one of the best for the home garden as well as for market. Roots 6 to 7 inches long, same the whole length, with a smooth waxy appearance that makes them very attractive. Sweet and tender, which makes it a favorite for eating raw as well as cooked.
Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25.

88 OXHEART. (74 days.) A short, thick growing variety, especially adapted to stiff or hard soils. Roots 4½ to 5 inches long, very thick, ending abruptly in a small tapering root. The flesh is bright orange, of the finest quality, an excellent sort for market or home use, and fine for stock feeding and poultry.
Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00.

89 IMPERATOR. (77 days.) Award of Merit, All-America Selections, 1933. Fine variety for home use. Sloping shoulders and semi-blunt end; 7 to 8 inches long; rich orange color with indistinct core.
Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00.

90 DANVERS HALF LONG. (75 days.) A deep orange, tender variety, producing roots of medium length, 6 to 8 inches long, tapering uniformly to a blunt point. They are very productive and well adapted to nearly all classes of soil for main crop.
Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00.

91 CHANTENAY. F. (70 days.) A medium early variety, orange-red color, crisp and tender. Roots smooth, thick, 5½ to 6 inches long, uniformly stumpy-rooted but tapering slightly. One of the best in quality and productiveness for either home garden or market and especially desirable for heavy soils, because it can be harvested easily.
Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00.

92 IMPROVED LONG ORANGE. (85 days.) A well known popular sort, well adapted for loamy or deep soil, on which are produced very large crops. Roots deep orange, usually about 12 inches long, 3 inches in diameter at the crown, tapering to a point. Excellent for table use, markets, and particularly fine for stock feeding. Roots tender, of good quality.
Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00.

CELERY

Culture. For the earliest crop the seed should be sown in hotbeds from the middle of February to the end of March. For main crop sow in open ground March or April, according to the weather, in rows 15 inches apart. The seed is sometimes slow to germinate, and in dry and hot weather water well. Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and between the plants. The stalks are handled by hand but the soil must not be allowed to get in the center. An ounce of seed produces about 3000 plants.

95 WHITE PLUME. (112 days.) An extra early and very handsome sort which is popular with market gardeners, especially for early crop. Leaves are light, bright green at the base, shading nearly white at the tip. As plants mature, the inner stem and leaves turn white and consequently require less earthing and blanching before they are in condition to use for market.
Pkt., 10c; ½ oz., 40c; oz., 75c.

CELTUCE

100. Easy to grow. Plants grow quickly, forming a rosette of light green leaves which may be eaten as a salad, or cooked as "greens." In less than 90 days after seed is sown, the central stem or stalk is usable and will be found most tender at this age. The stalks are solid throughout, the stem greenish white and tough, but the inside is very succulent, most delicate pale green, crisp and brittle. The stalk may be eaten raw or cooked. In either case, the outer skin is removed, and only the tender, light green heart is eaten. As a raw vegetable, the centers of the stalks are cut into four- or five-inch lengths and split lengthwise, chilled and eaten as you would celery or carrots with salt. Cooked CELTUCE stalks are pale green, attractive, and have a pleasing, mild flavor, suggestive of celery or lettuce. It can be cooked in many ways such as celery au gratin; steamed like asparagus and served with a favorite sauce; or plain boiled and served hot with butter and lemon sauce.

Make first sowing of seed as soon as ground can be worked in the spring. Succession sowings at intervals of a week or ten days until July first, will give a continuous supply. Seed may also be started indoors four to five weeks before outdoor planting time and the seedlings set in the open as early as the ground can be worked.

Grow CELTUCE—it is good, it is interesting, and it is healthful.
Pkt., 15c.

CAULIFLOWER

Culture. For early spring or summer crop sow the seed in January or February indoors or under glass. When the plants have four leaves, transplant to cold frames for development. Toward the end of March or early part of April, set in open field and cultivate the same as cabbage. For fall use sow at the same time as late cabbage and treat in the same manner. Cauliflower will not head in very hot weather—hence for fall use, too early sowing is not desirable.

One-fourth ounce produces about 500 plants. One ounce will make enough plants to set 1 acre.

Cauliflower plants supplied in season. We do not send these plants by mail.

94 EARLY SNOWBALL. F. (54 days.) Unquestionably the earliest maturing strain of short leaf type of Cauliflower. It is well adapted for forcing or winter use for early crop and is one of the most popular of all sorts, both for the market gardener and for home use. The plants are compact, leaves small, and can be adapted for close planting. Large size, pure white flowers, of most excellent quality.
Pkt., 25c; ¼ oz., \$1.00.

97 GOLDEN SELF BLANCHING. (118 days.) This is not only a very early variety but one of the best for home use or market. It is not quite so early as White Plume but so much finer quality that it is generally preferred as a main crop sort. Plants are medium size, compact and stocky, with yellowish green foliage. As they mature, the inner stem turns a beautiful golden yellow color and blanching is easily accomplished. Being of handsome color, very crisp, tender, free from stringiness and of fine flavor, it is the leading sort grown.
Pkt., 15c; ½ oz., 50c; oz., 95c.

98 GIANT PASCAL. (140 days.) A green leaf variety of the Golden Self Blanching type, and one of the best for fall and early winter use. It blanches a beautiful yellowish white, is very solid and crisp and has a fine nutty flavor. Stalks of medium height, thick, solid, flattening towards the base and one of the best for main or late planting.
Pkt., 10c; ½ oz., 40c; oz., 75c.

99 CELERIAC or TURNIP-ROOTED CELERY. (110 days.) Used for its roots only, which have a fine, sweet, nutty celery taste. It is used either boiled or raw, has a delightful flavor and can be used in soups, salads or as a table vegetable. Culture about the same as for celery.
Pkt., 10c; ½ oz., 35c; oz., 60c.

Celery Plants supplied in season (June, July and August). We do not send these plants by mail.

COLLARDS

Although often sown during the spring and summer, the principal sowings are made in June, July and August, transplanted 2 feet apart in the row and given frequent cultivation. A most excellent vegetable for the late fall, winter and early spring. The flavor is improved by frost. Cultivate like late cabbage.

101 GEORGIA or SOUTHERN. 75 days.) Stands cold weather and adverse conditions splendidly and grows on land too poor to make a crop of cabbage.
Pkt., 10c; oz., 15c; ¼ lb., 45c.

A. S. T. A. GARDEN SEED ASSORTMENT FOR
EUROPE

See Page 17

SWEET CORN

Our Northern Grown Sweet Corn is far superior in quality and earliness to the same varieties raised from seed grown in the South and West, where most of the Sweet Corn seed is grown.

One pound plants about 200 hills, 12 to 14 pounds to an acre. For succession, plant about every 2 weeks from April to the end of July; ready for the table 60 to 90 days from planting.

Culture. Garden-Field varieties can be planted at the end of March or early in April. Sugar or Sweet Corns are more tender and should not be planted until warm weather is settled and the ground becomes warm. Cultivate frequently and keep the ground free of weeds.

Hybrid Types

102 Ohiogold 1 Developed by Agronomy Dept., Ohio State University. (90 days.) Ohiogold 1 produces a rugged stalk. The plants are tall and about six days later in maturity than those of Golden Cross Bantam. Yields of Ohiogold 1 have exceeded those of Golden Cross Bantam by about 25%. The ears are long and carry 12 to 14 rows of medium yellow kernels. Quality excellent. Gardeners have long wanted the combination of high yield and fine flavor. Certainly Ohiogold 1 has given them all they have asked for.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

103 Ioana (85 days.) Here is a grand Sweet Corn with a quality flavor. It was developed by Dr. E. S. Haber of the Iowa Experiment Station. The plants are about 7 feet tall, sucker free, and quite vigorous. Ears are uniform with 12 rows of sweet, toothsome kernels to the ear.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

104 Evergreen Hybrid (90 days.) Ears 7½ to 8½ inches long, with 14 to 18 rows of deep, narrow, white kernels which are tender and very sweet. Recommended for home or market garden as well as for canning. 8 to 10 feet tall. Differs from open pollinated Stowell's

Evergreen in having a smaller ear, narrower and deeper kernels and greater uniformity of maturity. The ears are about 2 inches across at the butt and taper slightly.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

105 SPANCROSS (C13.4). (73 days.) All-America Selection Honorable Mention, 1941. One of the earliest. Ears about 6½ inches long. 10-12 rows of cream-yellow kernels. Stalks about 5 feet tall. Highly resistant to bacterial wilt.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

106 MARCROSS (C13.6). (76 days.) Developed by the Connecticut Experiment Station. Stalks short but sturdy. Highly resistant to bacterial wilt. Ears very attractive, about 7 inches in length with 10 to 14 rows of light cream-yellow kernels of fine quality.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

107 GOLDEN CROSS BANTAM. F. (85 days.) At present, this is the leading hybrid sweet corn. Highly resistant to bacterial wilt, uniform in growth, maturity, and heavy yield. Stalks about 7 feet high, ears about 8 inches in length, 10 to 14 rows, kernels rich yellow.
Pkt., 20c; ½ lb., 40c; 1 lb., 70c; 5 lbs., \$3.00.

Open Pollinated Yellow

109 GOLDEN BANTAM. (70 days.) Selected Northern Grown. The most popular variety of yellow Sweet Corn ever offered; also one of the earliest and hardiest. It can be safely planted earlier than other varieties. The plants rarely grow over 3½ feet in height, and usually bear at least two ears, 5 to 6 inches long, on each stalk. Many people assert that Golden Bantam is the sweetest of all Corns; its plump, rich, cream-yellow kernels are tender, milky, and delicious. All our Golden Bantam seed is northern grown.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

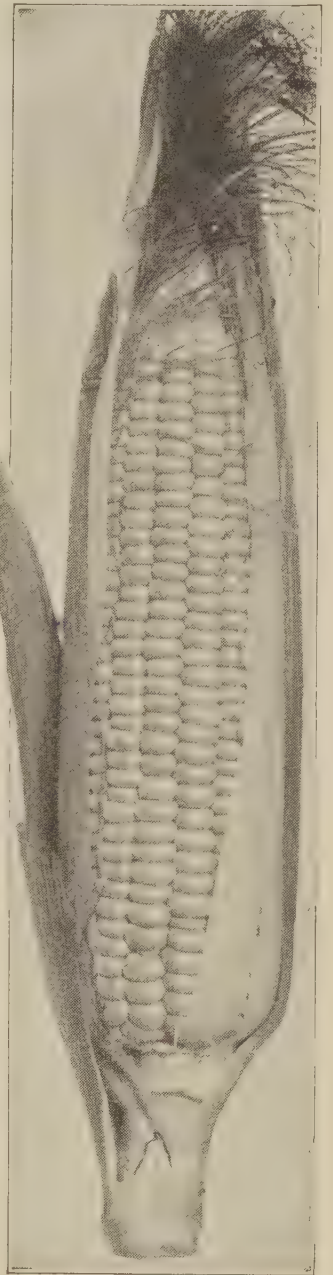
110 WONDER BANTAM. (72 days.) There has been an ever-increasing demand for an early Sweet Corn having all of the good qualities of Golden Bantam Sweet Corn, together with a larger ear and having about the same maturing season. To accomplish this, Wonder Bantam has been introduced by the crossing of Early Wonder and Golden Bantam Sweet Corn. The stalks grow from 5 to 6 feet in height and have

ears 8 to 10 inches in length with 8 rows of rich, golden colored kernels.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

111 GOLDEN SUNSHINE. (68 days.) The earliest of the Golden Bantam type. More dwarf in habit than Bantam, with ears 6½ inches long, containing 12 rows of broad, yellow, sweet grains. Desirable for its extreme earliness.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

112 GOLDEN GIANT. (87 days.) It excels all other early varieties of Corn in size, productiveness and quality; and all the late varieties in quality and early maturity while equalling them in size.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

113 BANTAM or GOLDEN EVERGREEN. (87 days.) A cross between Golden Bantam and Stowell's Evergreen, and is a most excellent sort of fine quality. The ears average 8 inches long and are 12-rowed, the grain is rather broad and deep, and of a rich golden yellow. Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.



Golden Cross Bantam

Open Pollinated White

115 WHIPPLE'S EARLY WHITE. (85 days.) Of the narrow-grained Evergreen type, but ready for use much earlier. Ears 8 to 9 inches long, 16 to 18 rows of pearly white grains. This variety is by far the earliest of the narrow-grained Evergreen types and has a larger sugar content. Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

116 EARLY EVERGREEN. (85 days.) An early strain of Evergreen of great value. This variety resembles Stowell's Evergreen, but is ready for use earlier and remains in good condition equally as long. Ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep sweet grains.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

117 COUNTRY GENTLEMAN. (90 days.) Probably the most popular of all sorts for home gardens on account of its sweetness, tenderness and delicious flavor. Ears 7 to 8 inches long, round, medium size. Grains zig-zag or staggered, small in size but set close on the cob and very deep. Pkt., 15c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00.

118 HOWLING MOB. (80 days.) A popular, productive, large-eared variety; valuable for home and truck gardeners. Ears measure 7 to 9 inches in length, 12 to 16 rows; white grains. Stalks strong, of vigorous growth, 5 to 6 feet in height, have abundant foliage and usually produce two good ears to the stalk.
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

TREAT YOUR SEED CORN!

Many growers are getting better stands and therefore, better crops by treating their seed with SEMESAN JR. Protects seed from rotting in the ground and will help prevent damage by diseases to roots, stalks, and ears. The cost is so low that no one can afford not to take advantage of this crop insurance.

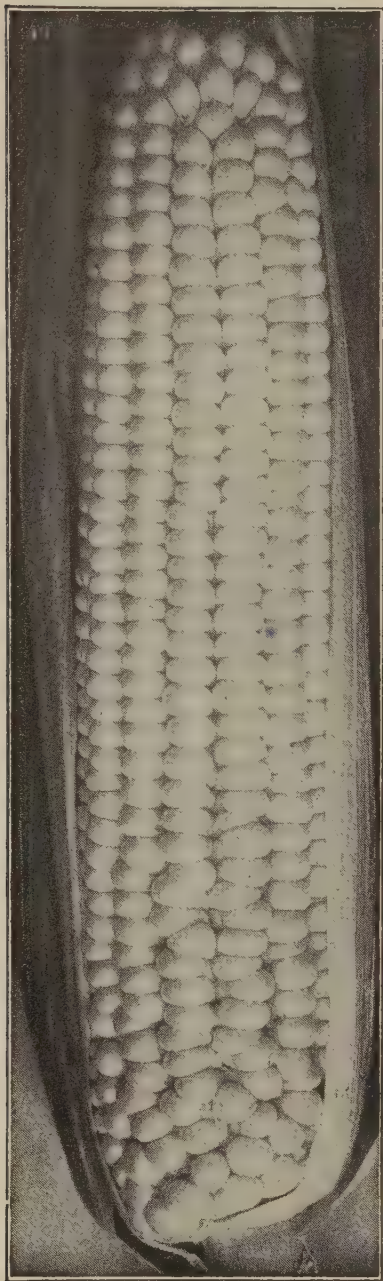
1½ ounces will treat 1 bushel of shelled Corn.

1½ ozs., 15c; 12 ozs., 56c.

Plant Plenty of Vegetables to Eat from Your Garden and to Can

WHEN ORDERING, SEE PAGE 64 OF THIS CATALOG

OPEN POLLINATED SWEET CORN - Continued



Stowell's Evergreen

119 STOWELL'S EVERGREEN. (90 days.)

One of the standard main crop sorts which has long been popular with commercial growers and canners, and is one of the best for home gardens. It is hardy, thrifty, productive, very tender and sugary, and remains in edible condition longer than most other sorts. Ears 8 to 9 inches long, having 16 to 18 rows of very deep grains. Stalks sturdy and erect.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

122 Zig-Zag Evergreen

(90 days.) A late variety of Zig-Zag Evergreen Corn, the ears are generally twice the size in diameter of any other sort and of a fine, sweet flavor.

Pkt., 15c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00.

123 BLACK MEXICAN. (83 days.) For home use we consider this one of the best second early sorts where tenderness and sweetness are the qualities most desired. The stalks grow about 6½ feet high, producing ears usually 8 inches long and 8-rowed. The dry grain is dark bluish black. The ripe Corn on the cob is also bluish black, but if used young, this Corn cooks remarkably white. This is an interesting variety.

Pkt., 15c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00.

124 AUNT MARY CORN. (90 days.) A white Corn having 10 rows. Very sweet.

Pkt., 15c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00.

Early Dent Garden Corn

These are not Sugar Corns but valuable for their hardness as they can be planted earlier and will mature quicker than Sugar Corns—hence, usually very profitable for market gardeners.

125 EXTRA EARLY ADAMS. (70 days.) The earliest variety and extensively used for first early table corn in the South. Stalks about 4 feet high with few leaves and without suckers. Ears short, very full, 12 to 14 rows, kernels white and smooth; an extremely hardy sort; can be planted close together and is usually popular.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25.

126 EARLY ADAMS. (73 days.) A little larger and later sort of about the same characteristics as Extra Early Adams. Stalks about 6 feet high, ears 12 to 14 rows and a good variety for second or very late planting.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25.

127 TRUCKER'S FAVORITE. (78 days.) A late variety of the Adams type; ears 9 to 10 inches long, 14- to 16-rowed. Has dual value in producing good crop of feed corn if roasting ear market is unfavorable.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25.

POP CORN

A very profitable crop in many sections and grown in enormous quantities. It is popularly "the boys' crop" and all gardens should have a small quantity.

128 LARGE YELLOW PURDUE HYBRID.

Hybrids produce a larger popping expansion, increased volume—a very desirable qualification.

Pkt., 20c; ½ lb., 40c; 1 lb., 75c; 5 lbs., \$3.50.

129 WHITE RICE. (90 days.)

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

130 JAP. HULLESS. (85 days.)

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

131 SOUTH AMERICAN LARGE YELLOW. (100 days.)

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

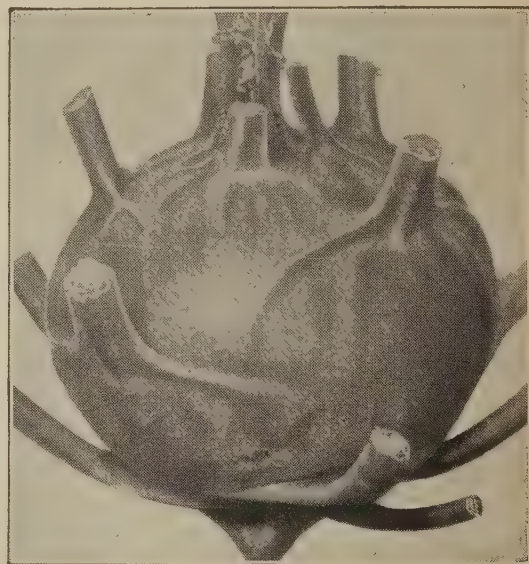
CORN SALAD

(Lamb's Lettuce)

An excellent salad for winter and spring. The seed is sown in August or September, in drills 1 foot apart. Press on the soil to make it firm and seed will germinate better. As freezing weather approaches, cover with straw or coarse litter. Can also be sown very early in the spring if on rich soil. The best variety.

132 BROAD LEAVED. (45 days.) Round leaved.

Pkt., 25c; ½ oz., 35c; oz., 65c.



Kohl Rabi

DILL

(70 days)

One ounce will sow 50 ft. of row.

147. Dill is an annual herb used for seasoning pickles, sauces, soups, etc. It is so easily grown that every garden should have a short row of this valuable herb.

Pkt., 10c; oz., 25c; ¼ lb., 75c.

KOHL RABI

A vegetable intermediate between a cabbage and a turnip which combines the flavor of both. It forms a turnip-shaped bulb above ground which is boiled and served like turnips. If used when young, is tender and a very desirable vegetable.

Culture. For early use sow in hotbeds and transplant. Out-of-doors sow in open ground the first part of April in rows 18 inches apart; thin out or transplant to 6 inches apart in the row. Cultivate same as cabbage. It can also be sown the latter part of June or in July for fall use. One ounce will sow 300 feet of drill.

168 EARLY PURPLE VIENNA. (60 days.)

Very early with small tops, bulbs good size. A variety of good quality.

Pkt., 15c; ½ oz., 35c; oz., 60c.

169 EARLY WHITE VIENNA. (55 days.) An excellent sort for general use, has white tender flesh of pleasant flavor.

Pkt., 15c; ½ oz., 35c; oz., 60c.

EGGPLANT

Seed germinates slowly and should be started in hotbed.

One ounce produces 1000 plants; four ounces will produce enough to set out one acre.

Culture—Sow in February or March in warm hotbeds. When plants have two rough leaves, transplant to 3 or 4 inches apart or into small pots; after all danger of frost is past, about the middle or end of May, transplant to the garden, setting plants about three feet apart each way. Shade young plants from hot sun.

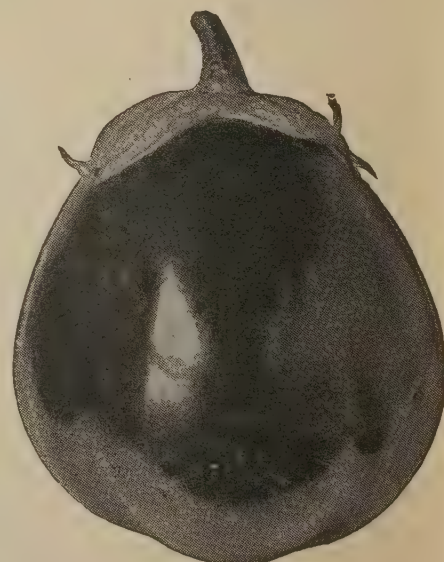
148 BLACK BEAUTY. (80 days.) Fruits slightly longer and darker than any other variety, being rich dark purple, large and symmetrical. It is very desirable for market as it holds its color a long time. It is entirely free from spines; splendid for early crop or very late planting.

Pkt., 15c; ½ oz., 40c; oz., 75c.

Plants—Ready in May. We do not send these plants by mail.

FEED THE WILD BIRDS

They Will Help You Fight Insects
In Your Garden.



Black Beauty Eggplant

For Pickling

CUCUMBERS

For Slicing

One ounce plants 50 hills; two pounds to one acre. Plant in April or May for early crop. Ready for the table 50 to 75 days from planting.

Culture. Rich soil or one containing plenty of well-rotted manure is best; hence hills are usually made about 4 feet apart using manure or sheep manure well mixed with the soil. For earliest crop outdoors, plant 8 to 10 seeds in hills or drills 4 feet apart. After danger of frost and destruction by insects, thin the plants to about four to the hill. For late crop plant from the end of May until July. Cultivate occasionally, keeping the grass and weeds out, and when the fruit is ready for use, pick whether wanted or not, as it will extend the life and productiveness of the vines.

133 A. & C. CUCUMBER. (67 days.) This beautiful cucumber is very popular wherever grown, because of the large yield of fine fruits. About 10 inches in length, well rounded at ends and very dark green.
Pkt., 10c; oz., 35c; ¼ lb., \$1.20.

134 STRAIGHT EIGHT. (65 days.) 1935 All-America Gold Medal Award. One of the finest cucumbers which has been offered in many years. As its name indicates, it grows very straight; a long, slender fruit with a slight taper at each end. At the edible stage, the length averages about 8 inches and the color is a rich dark green. This is a very attractive cucumber and the fine quality makes it an excellent sort for slicing.
Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

135 LONGFELLOW. (72 days.) A White Spine type, developed so that it would have the slender, dark green appearance of a hothouse cucumber, but which could still be grown outdoors. Vines are vigorous and productive. Fruits 12 to 14 inches long and 2½ inches in diameter. Can be grown in the garden or greenhouse; stands shipping well.
Pkt., 10c; oz., 40c; ¼ lb., \$1.20.

136 EARLY WHITE SPINE. (60 days.) One of the best sorts for table use and probably the most popular sort grown by market gardeners and truckers. The vines are vigorous, producing fruit early and abundantly. Fruits are uniformly straight, about 8 inches long, vivid green coloring changing to and streaked a whitish green at the tip.
Pkt., 10c; oz., 25c; ¼ lb., 80c.

137 IMPROVED LONG GREEN. (68 days.) One of the most popular sorts for home gardens and in country districts for home markets. Fruits are very long, often 12 inches, slender and uniformly dark green color. It is rather late maturing. The vines are very vigorous and fairly productive. The matured fruits are excellent and tender for table use and both large and small can be used for pickling.
Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

138 DAVIS PERFECT. (67 days.) A development by crossing the Improved Long Green with an English frame variety. It is dark, rich green color, slightly tipped with white at the end; has very few seeds and is excellent for slicing. Fruits are often 12 inches long, very slim and showy. Particularly fine for home gardens.
Pkt., 10c; oz., 30c; ¼ lb., 90c.

139 EARLY FRAME. (56 days.) A well known, short, green variety, producing abundantly, straight, moderate sized fruit. Fine for very early planting or pickling, more prolific than the large-fruited sorts.
Pkt., 10c; oz., 20c; ¼ lb., 65c.

140 Early Fortune (60 days.) The finest type of White Spine yet introduced. Early and very productive; fruits grow 9 inches long, slightly tapering, flesh white, firm and crisp with very few seeds; color dark green. Quality is excellent either when sliced, or for making pickles.
Pkt., 10c; oz., 25c; ¼ lb., 80c.



National Pickling Cucumber

142 BOSTON PICKLING. (58 days.) Very productive. Fruits short, bright green and very best type.
Pkt., 10c; oz., 20c; ¼ lb., 65c.

143 NATIONAL PICKLING. (56 days.) Due to its remarkable solidity and heavy yields, this is today one of the favorite pickling sorts. It is just as firm after pickling as before. Early, dark rich green, straight and symmetrical, and can be used when very small.
Pkt., 10c; oz., 30c; ¼ lb., 90c.

144 JERSEY PICKLING. A variety shorter than Long Green, slender and produces very abundantly. Vines are vigorous and productive. A very popular main crop sort for market and commercial uses.
Pkt., 10c; oz., 20c; ¼ lb., 65c.

145 EARLY GREEN CLUSTER. (52 days.) Short and prickly; bearing in clusters; prolific; fine for bottling.
Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

146 WHITE WONDER. (58 days.) Fruit, produced in clusters, is symmetrical, short, blocky, and rounded at both ends; color ivory-white from time of forming until maturity; moderately productive.
Pkt., 10c; oz., 40c; ¼ lb., \$1.20.

KALE or Borecole

A popular crop for fall, winter and spring use as "greens." In addition to its table use it is a splendid soil improver and very nutritious as a grazing crop for cattle, hogs or sheep.

Culture. In this section it is usually sown broadcast from the middle of August to the middle of October at the rate of 3 to 4 pounds to the acre. Scotch Kale is sown earlier and when very early is usually sown in drills. In the spring, seed can be sown in February, March and April. 1 ounce of seed sows 200 feet of drill, 3 pounds per acre.

164 DWARF BLUE SCOTCH. (55 days.) Dark blue-green and very curly. One of the most handsome varieties. On account of the short stems, the leaves rest practically on the ground. The leaves are wide-spread and plumelike, very dense, dark blue-green, and retain their color after cutting.
Pkt., 10c; oz., 30c; ¼ lb., 90c.

165 DWARF SIBERIAN. (60 days.) A vigorous growing sort of spreading habit, its green foliage having a distinctive bluish tinge or bloom. Very hardy and a favorite in many sections for greens and extensively grown for forage.
Pkt., 10c; oz., 20c; ¼ lb., 60c.

166 DWARF GREEN CURLED SCOTCH. (55 days.) A finely curled, spreading, low-growing variety, which is very popular in many trucking centers, especially in the East. The leaves are attractive, bright green color and beautifully curled, which makes it excellent for garnishing. It must be sown earlier than other sorts; usually from July until end of August, or can be sown in March. Can be sown either in drills or broadcast.
Pkt., 10c; oz., 25c; ¼ lb., 75c.

167 TALL GREEN CURLED SCOTCH. (60 days.) Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost. **Crop Failure.**

LEEK

A kind of onion that does not form a bulb, but grows in a long stem, which is blanched by drawing earth around it. When blanched it makes an appetizing salad, or is eaten like green onions. Boiled, they are more delicate in flavor than the mildest onions. Seed is sown in the spring and the leek is ready in the fall. Given a little protection with dirt, it will last over winter and give a welcome addition to the early spring menu.

170 GIANT MUSSELBURG. (150 days.) The most extensively used of the strong growing types. It is broad-leaved, with short but very thick stems, uniform, and of fine quality.
Pkt., 15c; ½ oz., 50c; oz., 90c.

GARLIC. Bulbs only, ½ lb., 60c; 1 lb., \$1.00.

ENDIVE

One of the best salads for fall and winter use, and sometimes used for greens, flavoring soups and stews. It may be grown at any season but is more generally planted for fall.

Culture. For early use, sow about April 15th; for later use, sow in June or July, in drills 18 inches apart, and when large enough thin out to about 1 foot apart. When nearly grown, tie the outer leaves together over the center in order to blanch up the heart. By covering fresh plants every few days a succession may be kept up. One ounce to 100 ft. of row.

150 GREEN CURLED. (93 days.) One of the hardiest and best varieties for general use. It has deep green leaves, beautifully cut and curled, is easily blanched; very crisp, tender and of fine flavor.
Pkt., 10c; oz., 25c; ¼ lb., 75c.

151 BROAD LEAF BATAVIAN (Escarolle). (90 days.) A variety having broad, more or less twisted, waved, bright green leaves with thick white midribs. It is much larger in growth than other sorts and has a flavor all its own. The inner leaves form a very solid, clustering head; are blanched a beautiful deep, creamy white; crisp, tender and of fine flavor. Very highly esteemed by the French and popular wherever used.
Pkt., 10c; oz., 25c; ¼ lb., 75c.

152 MOSS CURLED. (93 days.) A compact growing variety forming large dense clusters, finely divided, medium green leaves. When properly blanched is rich creamy white and tender. An ornamental variety for salads.
Pkt., 10c; oz., 25c; ¼ lb., 75c.

153 WHITE CURLED. (98 days.) Plants 12 to 13 inches in diameter; leaves finely curled, with broad ribs slightly rose tinged. Creamy white at the heart. Handsome in appearance and of fine flavor; excellent for salads.
Pkt., 10c; oz., 25c; ¼ lb., 75c.

154 GARDEN HUCKLEBERRY

This is a novelty, well described by the above name, which bears racemes or bunches of black berries, tomato-shaped, ½ to ¾ inch in diameter, which make excellent pies and preserves. The bushes are about 3 feet tall. Cultivation is the same as with the tomato of which this plant is a distant cousin.

Pkt., 15c; ½ oz., 30c; oz., 50c.

LETTUCE

The smallest of home gardens can easily grow plenty of Lettuce. By making successive sowings and using the Lettuce as it is thinned, a supply can be had throughout the season.

Lettuce seed germinates quickly and may be planted as soon as the ground can be prepared in the early spring. Sow seed in rows 15 to 18 inches apart, covering not more than one-half inch deep.

To grow good head Lettuce, requires rich soil, plenty of moisture, and steady growth from the time the seeds are planted until the heads are ready to use. A check in growth from lack of nourishment or moisture usually means no head. The most satisfactory results come from growing Lettuce in cool weather. The plants should be thinned to 10 inches apart in the row and thorough cultivation given to keep down the weeds and conserve moisture.

One ounce sows about 250 feet of row; 3 pounds for 1 acre.

Curled or Loose-Leaved Varieties

171 SLOBOLT. (43 days.) A recent introduction by the U. S. Department of Agriculture. Similar in type and general appearance to Grand Rapids. Its tendency to remain in condition for a long period makes it very desirable for the home or market gardener. **Pkt., 20c; oz., 75c; ¼ lb., \$2.25.**

172 BLACK-SEEDED SIMPSON. (45 days.) The best sort for nearby markets and for home gardens on account of its superior quality. It forms a large, loose head, very bright green, nearly white and is exceedingly tender. Is largely used for forcing under glass and is a superior sort for earlier crops. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

173 GRAND RAPIDS. (43 days.) Special forcing strain. The most popular variety for greenhouse forcing, especially for shipping. It is of quick growth, hardy and not liable to rot; remains in good condition several days after being fit to cut. Plants are upright and uniform; leaves finely crumpled at the edges. It is the heaviest loose-headed sort, will stand shipping better and is a very attractive variety. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

174 EARLY CURLED SIMPSON (White-Seeded). (45 days.) Makes a large, loose curled head similar to Black-Seeded Simpson. Particularly adapted for sowing thickly and cutting when the plants are young. Leaves light green, slightly frilled, much blistered, crisp, sweet and tender. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

175 PRIZE HEAD. (45 days.) A large clustering, non-heading sort, most excellent for home gardens as it is very early. Leaves broad, crumpled, and frilled; outside leaves tinged red, inner leaves entirely green; very crisp, sweet and tender. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

176 OAK LEAF. (40 days.) This excellent variety is noted for its ability to withstand hot weather without turning bitter. Leaves are smooth and lobed to resemble the leaf of an oak tree. Deep green and tender. **Pkt., 15c; oz., 60c; ¼ lb., \$1.75.**

Crisp Heading Varieties

177 Bibb (60 days.) A loose waxy head with very deep green outer leaves, bleaching to a rich yellowish green inside. Heads medium size, unusually crisp and tender, and of a distinct flavor. Very popular for family gardens, high class hotel and restaurant trade. One of the best winter forcing varieties. **Pkt., 15c; oz., 50c; ¼ lb., \$1.50.**

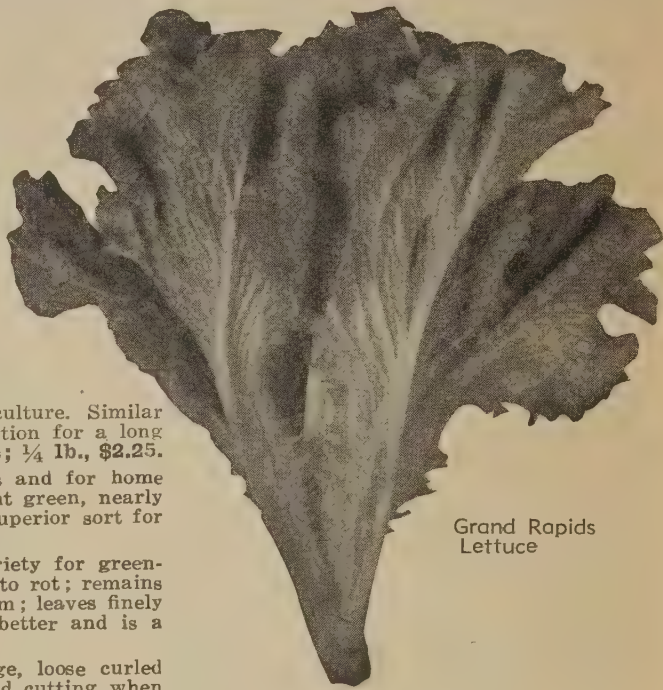
178 GREAT LAKES LETTUCE. (83 days.) Great Lakes, developed at Michigan Agricultural Experiment Station, is resistant to tip-burn. Heads are of good size. The leaves are dark green, attractively fringed and wrap tightly over the head, causing unusual crispness. Allow plenty of room for each plant—at least 14 inches each way. Thin the plants while small. **Pkt., 20c; oz., 75c; ¼ lb., \$2.25.**

179 ICEBERG. (82 days.) A beautiful Lettuce, with large, curly leaves of bright, light green, with a very slight reddish tint at the edges. Handsome heads, usually solid because of the natural tendency of the large, strong leaves to turn in which also causes thorough blanching. Crisp, tender and fine flavor. **Pkt., 10c; oz., 35c; ¼ lb., \$1.00.**

180 BIG BOSTON. (75 days.) Forms a large, compact head, forces well in frames and is thoroughly satisfactory for outdoor crops in the spring or very late head crops in the fall. Leaves are broad, comparatively smooth, color bright, light green. Heads slightly tinged with reddish brown. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

181 HANSON. (82 days.) A splendid summer heading sort and probably the most popular of its class in this section. The plants are compact, forming a large cabbage-like head which remains in good condition a long time. The outer leaves are yellowish green, somewhat crumpled with a large mid-rib, the inner leaves white, sweet and tender. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

182 NEW YORK No. 12. (78 days.) This variety is raised in California and shipped to Eastern markets as "Iceberg." Crisp, tender and free from bitterness. It produces immense heads, often 15 to 16 inches across and weighing enormously. The interior is beautifully blanching, creamy white. Withstands hot, dry weather. **Pkt., 10c; oz., 40c; ¼ lb., \$1.00.**



Grand Rapids Lettuce



Oak Leaf Lettuce

Cos or Romaine Lettuce

This type of Lettuce forms upright, loose folding heads, and the inner leaves bleach white. Heads readily in almost any climate.

184 TRIANON COS. (66 days.) Makes a well folded, cylindrical, medium green head. Interior pale greenish white. Smooth, crisp leaves. A distinct flavor all its own. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

MUSTARD

Mustard greens are as healthful and nourishing as spinach. The leaves of Mustard are more tender, and the stems are not so long and coarse. The plants are in condition for use as soon as the leaves are the size of one's hand.

Culture. Sow broadcast or in drills 12 inches apart in March or April, or in the fall in September or October. Cut when 3 inches high.

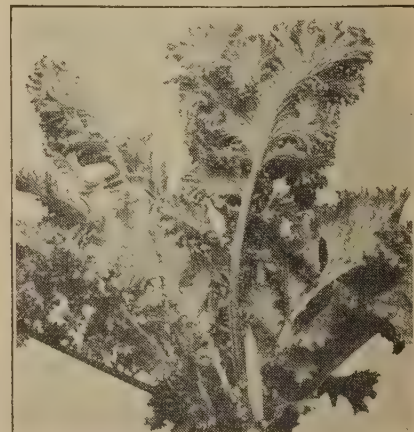
One ounce sows about 80 feet of drill. An acre requires 4 pounds.

220 FORDHOOK FANCY MUSTARD. (50 days.) Dark green, deeply curled and fringed leaves curving backward like ostrich plumes. Of mild flavor; splendid for greens or salads. **Pkt., 10c; oz., 20c; ¼ lb., 60c.**

221 MUSTARD SPINACH or TENDERGREEN. (45 days.) A desirable, quick-growing, tender variety with long, broad, fairly smooth leaves of dark green; white mid-ribs; slow to seed. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

222 SOUTHERN GIANT CURLED. (40 days.) A large growing sort with succulent, pungent leaves of sweet flavor. The best variety for use as greens. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

223 WHITE or YELLOW LONDON. Used for greens and the seed largely used for pickles and flavoring. **Pkt., 10c; oz., 15c; ¼ lb., 40c.**



Southern Giant Curled Mustard

MUSKMELON or CANTALOUPE

1 ounce plants 50 hills; 2 lbs. to 1 acre. Plant in May for early crop; in June for late crop.

It's Not Hard to Raise Melons

It is much easier to raise Melons than is usually supposed and they are so delicious a fruit that everyone who has any garden at all should raise some. All that is required is a good rich, well manured soil, that is not too heavy, and a warm, sunny situation.

Culture. Seed is planted in hills 6 feet apart, putting 10 to 12 seeds to the hill and covering 1 inch deep. If land is not rich, use well-rotted manure or a little sheep manure mixed with the soil. When danger of insects is over, thin out to 4 plants to the hill.

Green Fleshed Varieties

186 OHIO SUGAR. (91 days.) Resembles Tip Top except being green-fleshed. 7½ inches long, 6½ inches in diameter. A very good variety for the home garden. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

187 ROCKY FORD or NETTED GEM. (88 days.) The flesh is green, thick, with small cavity, very sweet and has that spicy flavor that makes a Cantaloupe so delicious. The melons are oval-shaped, slightly ribbed, well covered with fine netting and are uniform in size and shape. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

189 EXTRA EARLY HACKENSACK. (82 days.) Earlier than the Large Hackensack and produces medium sized fruit, somewhat flattened, evenly deep ribs with coarse netting. The flesh is green, slightly tinged with yellow, juicy and sweet. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

190 LARGE HACKENSACK (or Turk's Cap). (88 days.) An old and well known sort which produces very large, green-fleshed fruits which are nearly round and flattened. Flesh green, thick, juicy, and sweet. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

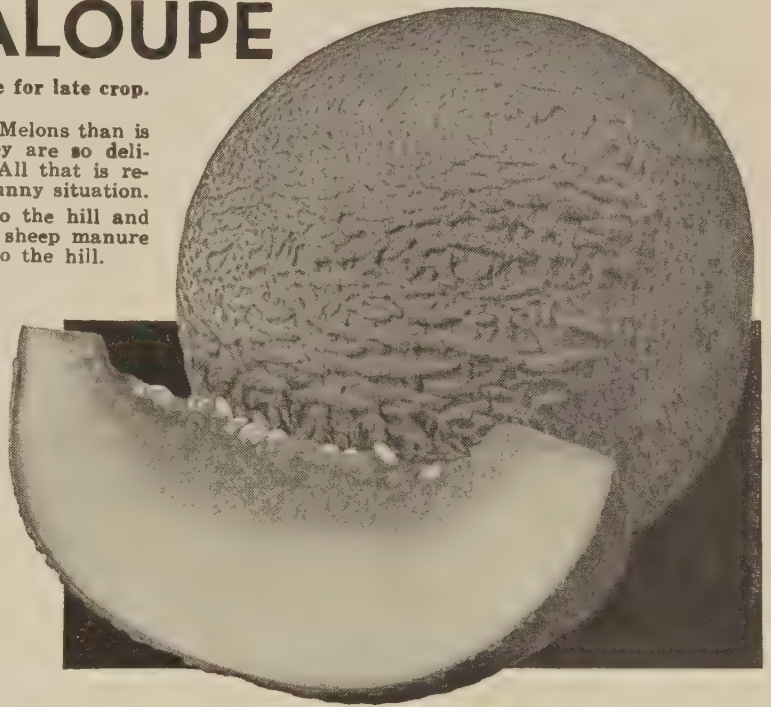
191 HONEY DEW. (112 days.) Its name has been well chosen, as it is about as sweet as honey. The average size is about 6 inches in diameter, and it weighs 5 to 6 pounds. The skin is smooth with a little netting and of creamy yellow when ripe. The flesh is beautiful green next to the outside rind shading to light green at center. It is very thick, fine grained, and can be eaten almost to the rind and the seed cavity is quite small. **Pkt., 10c; oz., 40c; ¼ lb., \$1.10.**

Orange Fleshed Varieties

193 PRIDE OF WISCONSIN. (85 days.) We believe Pride of Wisconsin to be the last word in a quality Melon—the deep colored sparkling orange flesh is totally unlike other cantaloupes. Rind is strong and hard, with heavy coarse netting. The seed cavity is triangular shape. This Melon is just the right size. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

194 BENDER'S SURPRISE. (90 days.) Exquisitely fine flavor, large size and earliness combine to make this new Melon a great favorite. The Melons are of oval shape; flesh deep orange, very thick, deliciously sweet and of high flavor. Grows fairly large, weighing up to 10 pounds each. The Melons are very firm, keep for a week after being picked. **Pkt., 10c; oz., 40c; ¼ lb., \$1.20.**

196 HALE'S BEST. (86 days.) Since its introduction, this variety has displaced some of the older popular favorites by its outstanding merit. An early Melon, ripening in 80 to 90 days. The nearly round fruits are normally 6 to 6½ inches long, densely covered with a medium heavy netting and almost devoid of ribbing. The flesh is very thick and fine grained, deep salmon-pink in color, richly flavored. **Pkt., 10c; oz., 45c; ¼ lb., \$1.25.**



The Famous Pride of Wisconsin

197 HEARTS OF GOLD or HOODOO. (92 days.) A new orange-fleshed variety, ideal as a shipping Melon and of the very finest quality. Fruits uniformly of medium size. Rind thin yet very firm. Flesh very thick, firm, of fine texture and delicious flavor. **Pkt., 10c; oz., 40c; ¼ lb., \$1.10.**

198 HONEY ROCK or SUGAR ROCK. (85 days.) The best recent introduction; originating in Indiana. Its extreme earliness is not the least of its valuable qualities. It is of medium size with a slate-gray rind and coarse, rope-like netting. It has a thick, pink flesh and a small seed cavity. The flavor is excellent. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

199 OSAGE or MILLER'S CREAM. (92 days.) A medium salmon-fleshed Melon of excellent quality. Fruits are oval, dark green, slightly ribbed, tinged with grey. Flesh salmon color, thick, and highly flavored. A splendid sort for late or main crop, especially for the market. **Pkt., 10c; oz., 45c; ¼ lb., \$1.25.**

200 TIP TOP. (90 days.) A popular sort with market gardeners, producing very large sized Melons, ribbed but almost smooth skin. Flesh salmon, very deep, a little coarse but exceedingly sweet and delicious. Especially desirable for very rich soil and one of the most profitable for market. **Pkt., 10c; oz., 35c; ¼ lb., \$1.00.**

201 BANANA. (96 days.) A long, smooth-skinned variety, growing somewhat in the shape of a long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Much esteemed in some localities. **Pkt., 10c; oz., 45c; ¼ lb., \$1.35.**



Melons Are Not Hard to Raise

PLANT A GARDEN Food—Health—Thrift

Protect Melons With Sabadilla Dust

This remarkable discovery has given marvelous results in the control of pickle worms, squash bugs, collard bugs and many other hard-to-kill insects. It is much safer to use than DDT and gives better control on some insects. We offer full 10% strength dust, which is so very effective. Order a supply with your seed to have on hand when insects first appear. 2-lb. bag, 75c.

WATERMELONS

Watermelons do best on old, rich soil, which is not too freshly manured, hence when making the hills, well-rotted manure should be used, and it is better to prepare them some time ahead before planting the seed. If manure cannot be obtained, use good commercial fertilizer or sheep manure mixed with the soil.

One ounce plants 20 hills; 2 pounds per acre. Plant early in May or for late use, in June.

Culture. Treat as for Muskmelons, but give more room, 10 to 12 feet apart each way.

202 Klondike Striped Blue Ribbon (80 days.)

(Wilt Resistant.) Considering eating, as well as shipping qualities, this variety is the best of the small Melons. Flesh is deep red, sweet, stringless and melting. Rind light green, conspicuously striped with darker green, thin, hard and tough, making it desirable for shipping. The firm flesh will keep many days. Size is just right for the customer to carry home, weight averaging about 25 lbs. This Blue Ribbon strain is resistant to wilt. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

203 EARLY KANSAS. (80 days.) The largest of all early Melons. It combines sweet flavor and bright red flesh, solid to the rind, which is not thick. Nearly round, light green with broad bands of wavy stripes. Every Melon a good one; no white or stringy hearts, and a wonderful shipper.

Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

204 KLECKLEY'S No. 6. (88 days.) A wilt-resistant Watermelon. This new strain marks a distinct advancement toward the development of the popular Watermelons where soil disease is serious. An improved Kleckley's Sweet type which has proven almost fully resistant to fusarium wilt. It is dark green, of good length with deep red flesh, and white seeds. **Pkt., 10c; oz., 35c; ¼ lb., \$1.00.**

205 COLE'S EARLY (Harris' Early). (75 days.) A very popular early variety. Fruits medium sized, about 20 pounds, short oval, with alternate dark and light green stripes; tender rind. Flesh pink-red; seeds black. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

206 STONE MOUNTAIN. (90 days.) A Melon of finest quality and claimed to be the sweetest of all the large Melons. It is almost round and has a dark green, medium thick rind. Flesh rich scarlet. It is not unusual to grow Stone Mountain weighing 70 to 80 pounds. For home use and nearby markets it is unexcelled.

Pkt., 10c; oz., 25c; ¼ lb., 75c.

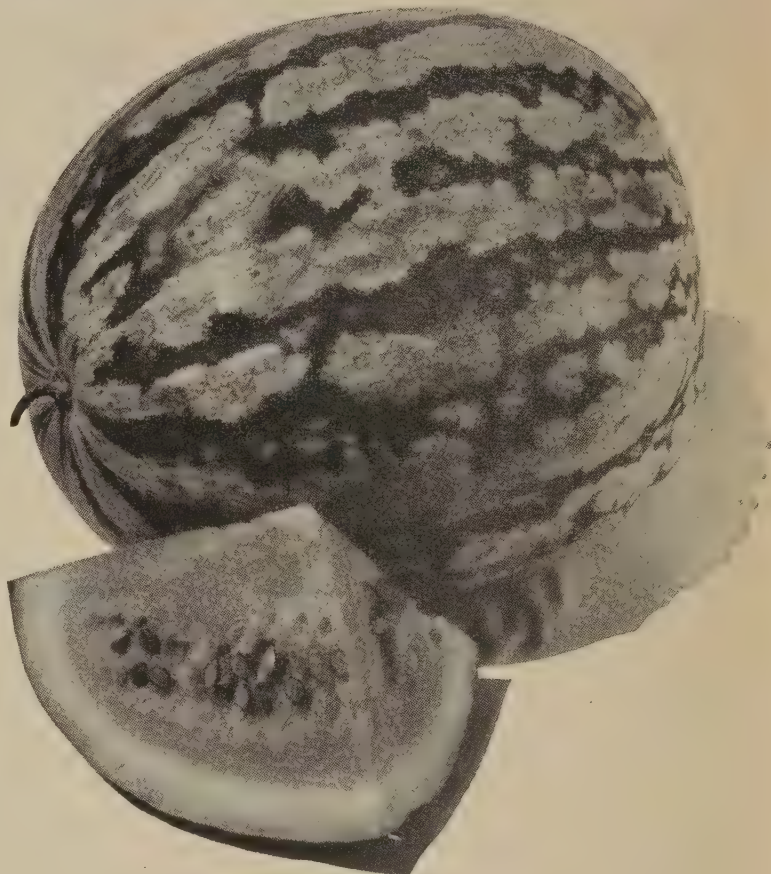
207 TOM WATSON. (92 days.) A long, dark green Melon, which has become exceedingly popular on account of its large size and general fine qualities. Vines are vigorous and productive. Flesh rich bright red, very juicy and sweet. Most suitable for nearby markets, family gardens, and a favorite with truckers, as it stands shipping well and retains its color and good quality a long time.

Pkt., 10c; oz., 30c; ¼ lb., 90c.

208 KLECKLEY'S SWEET or MONTE CRISTO. (85 days.) One of the best flavored Melons in cultivation and one of the best for home use or nearby markets. It is long, very dark green with thin rind. Flesh deep red, of fine, delicious flavor.

Pkt., 10c; oz., 30c; ¼ lb., 90c.

209 Florida Giant (88 days.) The largest and best of the so-called round type Watermelons. Dark green skin and the flesh deep bright red and of very fine quality and flavor. **Pkt., 10c; oz., 35c; ¼ lb., \$1.00.**



Klondike Watermelon

211 SWEETHEART. (90 days.) A very popular shipping sort, particularly in the South. Fruits are very large, oval, very heavy with thin rind which is of light green color, slightly veined with darker shade. Flesh bright red, firm, very sweet, and the fruits remain in condition a long time after ripening. A splendid sort for market or main crop, being of fine appearance and sells readily. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

212 DIXIE QUEEN. (85 days.) A leader for home gardens, local markets, and for shipping. Fruits nearly round with light and dark green stripes; thin, tough rind; flesh deep scarlet, crisp and sweet. Medium to large size, and very uniform. The few seeds are white. **Pkt., 10c; oz., 40c; ¼ lb., \$1.25.**

213 PEERLESS or ICE CREAM. (85 days.) A splendid early sort for home or market gardens. Vines moderately vigorous, hardy, and very productive. Fruits are oblong, medium size, bright green, finely veined with darker shade. Flesh bright scarlet, crisp and very sweet. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

214 GEORGIA RATTLESNAKE. (90 days.) Also called Gypsy. One of the most popular of the older sorts, especially in the South. Fruits are large, very long, of light green color, distinctly striped and blotched with darker shade. In the South it is very highly esteemed and especially desirable for growing and shipping. The rind is remarkably thin though very tough; hence, it stands shipping well. Flesh most tender, sweet and luscious. Fruits are uniformly good quality. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

215 HALBERT'S HONEY. (87 days.) A long, dark green Melon of moderate size but such splendid quality that it is especially desirable for market or home use. The rind is very thin. Flesh bright crimson and so crisp and tender that ripe Melons will split ahead of the knife in cutting. We especially recommend this for general planting as it is very productive, of excellent quality and a splendid seller. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

216 Small Red Sugar Lump Icebox (90 days.) This new variety of midget Watermelon is about the size of a Honey Dew Watermelon and will weigh about 5 pounds, small enough to fit conveniently in the refrigerator, with delicious rich red flesh and practically no rind. Sweetest, juiciest Watermelon you have ever been tempted with. This Melon originally came from Manchuria, and as Manchuria is a cold country they necessarily are extraordinarily early. This fact is of tremendous importance. **Pkt., 20c; 1 oz., 75c; ¼ lb., \$2.00.**



Small Red Sugar Lump Watermelon

MUSHROOM SPAWN

American-Grown Pure Culture Spawn

Our special leaflet, "Mushroom Culture," will be sent free if you ask for it. Follow the directions and you should grow splendid Mushrooms.

BRICK SPAWN. One brick will plant about 10 square feet. **50c a brick; 5 bricks, \$2.25.**

WHEN ORDERING, SEE PAGE 64 OF THIS CATALOG

OKRA or GUMBO

Okra pods are used in soups, stews, catsup and other relishes. They are at their best when 1 to 3 inches long. Rapidly becoming a most popular vegetable.

Culture. Sow in drills $2\frac{1}{2}$ feet apart after the weather has become settled and warm. Thin out to 18 inches apart in rows. To keep for winter, slice the pods when young in narrow rings and string or hang in the shade to dry.

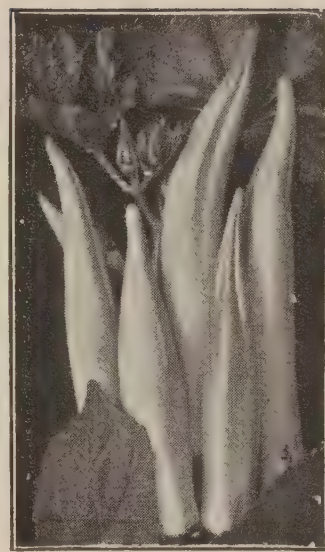
One ounce sows about 50 feet; 8 pounds per acre. Plant in April or May. Matures in 50 to 60 days from planting.

224 WHITE VELVET. (60 days.) An early maturing and very productive variety growing about $3\frac{1}{2}$ feet high.

Pods white, long, smooth, and very tender. This is not so deeply ribbed as the green sorts and is very popular in some sections. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

225 DWARF GREEN PROLIFIC. (50 days.) One of the most popular sorts in the South, growing 3 feet high, producing large pods, deeply ribbed, tender and of fine flavor. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

226 PERKINS' MAMMOTH LONG POD (TALL). (60 days.) Produces long, slender, deep green pods which remain tender a long time. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Perkins' Mammoth Okra

ONION SETS

There are three distinct classes of these. **Potato or Hill Onions** can be planted in the fall from August to November and produce green spring Onions, large Onions, and Sets. **Perennial or Egyptian Top** Onion Sets are planted in the fall and produce green spring Onions early in the spring. **Bottom Sets** or regular Onion Sets of commerce are small Onions which were previously grown from seed. These set out early in the spring or in the South in the fall, produce one large Onion from each Set, towards the end of June or first of July. Pickling Onions (which are a larger size bottom Set) are used in some localities for fall planting to produce early green spring Onions. All Onion Sets are hardy and can be set in the open ground as early as the weather will permit. They are usually planted in rows 15 inches apart—4 inches apart for small Sets and 6 to 8 inches apart for Potato Sets. Potato Onion Sets can also be planted in the spring. It takes about 16 bushels of bottom Onion Sets per acre, and 20 to 25 bushels of Potato Onion Sets, according to the size and distance apart.

Prices of Onion Sets are subject to market changes. Prices on application.



Paramount Parsley

ONIONS

One of the most nutritious and healthful of vegetables, having excellent medicinal qualities and most useful for flavoring salads, soups, meats, etc. It can be produced easily from either Sets or Seed and is one of the most satisfactory vegetables in the garden.

Culture, Growing Large Onions from Seed. Seed is sown in rows 15 inches apart as early in the spring as ground can be worked, and covered about one-half inch deep. When 2 to 3 inches tall, the young plants can be thinned to prevent crowding. They can be thinned again when 6 or 8 inches tall, and the plants removed can be used as green Onions. After that, they can be pulled as needed, and those that are left to become fully ripe can be stored for winter. One ounce sows 125 feet of row, 4 pounds of seed per acre.

230 HARDY WHITE BUNCHING. Used exclusively for green bunching, as it forms no bulbs. A hardy perennial, and produce for many years as long as a portion of the plant is allowed to remain. Seeds sown in the spring or summer will produce late in the fall or, if wintered over, very early the following spring. Plants increase in size as they grow older, and thinning to eight to twelve inches between plants is advised after the first year. Tender and of mild flavor.

Pkt., 15c; $\frac{1}{2}$ oz., 45c; oz., 85c.

231 YELLOW GLOBE DANVERS. (110 days.) One of the most extensively grown yellow Onions. Bulbs are of large size, uniformly globe-shape with small necks. Ripen evenly. Flesh creamy white, crisp and excellent flavor. Onions have a yellow coppery color, showy and handsome.

Pkt., 15c; $\frac{1}{2}$ oz., 35c; oz., 60c.

PARSLEY

Easily grown and useful for so many purposes, such as garnishing, seasoning salads and for ornamental purposes. Grown in the garden as edging it is both ornamental and profitable.

Culture. Seed is sown in rows $\frac{1}{2}$ inch deep and one foot apart. Cover firmly but not deep. As it is slow to germinate, usually taking 3 to 4 weeks, soaking in water is desirable. One ounce sows 150 feet of drill.

238 Paramount Triple Curled

(85 days.) Winner of the All-America Award of Merit. Very compact, 9 to 12 inches tall, foliage dark green, very uniformly curled. Unexcelled for home garden, market garden, or for forcing.

Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c.

239 MOSS CURLED. (70 days.) A beautifully curled and crimped variety with finely cut and curled leaves. Excellent for garnishing.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

240 HAMBURG or ROOTED. (90 days.) Has plain leaves, which can be used like ordinary Parsley. Plants form edible roots resembling slender Parsnips in color and shape. Roots are used for flavoring soups and stews, can be dug late and stored in winter.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

241 PLAIN or SINGLE. (72 days.) Plants spreading with dense, long stem, dark green foliage with leaves coarsely cut but not curled. Used for flavoring as well as for drying.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

PARSNIPS

This fine vegetable should be in every home garden. Parsnips grow best in a loose, rich, sandy soil, but will make good roots in any soil that is reasonably rich and deep. Parsnips are improved by freezing, and a portion of the crop can be left in the ground and will supply a welcome addition to the winter vegetables.

Culture. Sow in April in drills 18 inches apart, covering lightly. When the plants are about 2 inches high, thin out from 4 to 6 inches apart. One ounce will sow 150 feet of drill, 3 pounds to the acre.

242 HOLLOW CROWN. (95 days.) One of the best and most popular varieties for the table. Roots long, uniform in shape, have a smooth, white skin, tender and of good quality.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

PEANUTS

Peanuts can be successfully grown in warm, sandy soil in a sheltered place with a southern exposure. Plant in May or early June, in rows $2\frac{1}{2}$ feet apart. Drop the shelled nuts 8 to 10 inches apart, cover 1 inch deep. When the plants are nearly full grown, throw earth up to them.

IMPROVED VIRGINIA. Large and very prolific. Our seed is not shelled. Order 60 lbs. per acre and shell before planting.

Per lb., 50c; 5 lbs. or more, 45c per lb.

Hollow Crown Parsnip



GARDEN PEAS

Plant Enough to Can

One of the most popular crops in the home garden. One pound sows 100 feet in a row; 120 to 180 pounds per acre. The earliest sorts can be planted just as soon as the ground is in condition to work. They are not injured by light frosts. Wrinkled varieties a little later as they are tender. For fall crop sow in August.

Culture: Peas succeed best in light, rich loamy soil. The early dwarf varieties can be planted in rows 2 feet apart. The tall varieties in rows 3 feet apart. The seeds should be planted at a depth of 1½ to 2 inches. All varieties growing more than 1½ feet high do better if staked up or otherwise supported when 4 to 6 inches tall. This support is usually given by sharpened branches of trees or sticks. Tall varieties yield more abundantly than dwarf. Cultivate and keep clean, working the earth toward the vines rather than away from them.

Early Varieties

245 EXTRA EARLY. (54 days.) One of the best strains of extra early Peas; producing abundantly. Vines grow 2 to 2½ ft. high; pods 3 to 3½ inches long, well filled with fine delicious quality Peas. Not only is this probably the earliest of all garden sorts but its yield is so abundant that it is the most profitable variety of all for market gardeners, in addition to being the best early sort for home gardens. Seed is white, smooth, medium size. Vines thrifty, vigorous, robust and extremely productive.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50.

246 ALASKA. (54 days.) A favorite sort with Southern truckers, producing long, straight pods which will stand shipping, and remain green longer than white seeded sorts. The seed is blue, medium size. Vines about 2½ ft. high, fairly vigorous and usually produce good yields. Pods long, straight and of attractive appearance. This has long been a popular sort, is of fair quality and well known.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50.

247 Early Bird (60 days.)

Early Bird
Peas

The earliest large podded, dwarf sort. Vines about 18 inches high, foliage light green, producing an abundance of single and double, curved, pointed, medium-dark green, attractive pods

of about 4 inches in length; contain 9 to 10 peas. Peas are tender and of excellent flavor.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

248 GRADUS. (60 days.) One of the very best early wrinkled large Podded Peas. The pods are fully as long as Telephone. Vine similar in appearance and does not grow so tall, being of medium height, about 3 to 3½ feet. The pods are 4 to 4½ inches long, pointed, handsome and one of the most attractive of the early wrinkled sorts. Peas very large, splendid quality and a beautiful light green color. This has become one of the most popular varieties in cultivation.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

249 THOMAS LAXTON. F. (60 days.) A very popular gardener's variety. Height, 3 ft.; vine and foliage moderately stout, medium green; pods 3½ inches long, straight and square ended, containing 7 medium dark green Peas of excellent quality. Extremely productive.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

250 LAXTONIAN. (63 days.) One of the largest podded of the dwarf wrinkled Peas. Pods are about 4 inches in length, of a beautiful dark green color, similar to Gradus in shape, of splendid quality and mature a little earlier. Vines average 15 to 18 inches in height, vigorous, productive, and have dark green foliage.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

251 LITTLE MARVEL. (62 days.) An extra early dwarf wrinkled sort particularly suited to home gardens. Vines average 15 to 18 inches high; vigorous, dark green foliage. Pods 3 inches long, round with blunt ends and often contain seven rich, dark green Peas of high quality.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

252 AMERICAN WONDER. (60 days.) A favorite dwarf, early, wrinkled Pea which is highly esteemed and splendid for family use. Vines about 9 inches to 1 ft. high, covered with well-filled pods, medium size, about 2¼ inches long, containing 5 to 8 large, exceedingly sweet, tender Peas.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

253 LAXTON'S PROGRESS. F. (62 days.) Produces the largest pods of any of the early dwarf varieties. Vines average about 18 inches in height. The large dark green pods are borne in abundance and are well filled with extra large, tender Peas of superior quality.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

254 NOTT'S EXCELSIOR. (60 days.) A few days later than the American Wonder. Pods about one-quarter larger. It is remarkably hardy and can be planted almost as early as smooth sorts. Height, 1 to 1½ ft. One of the best for home gardens and profitable for market gardeners.

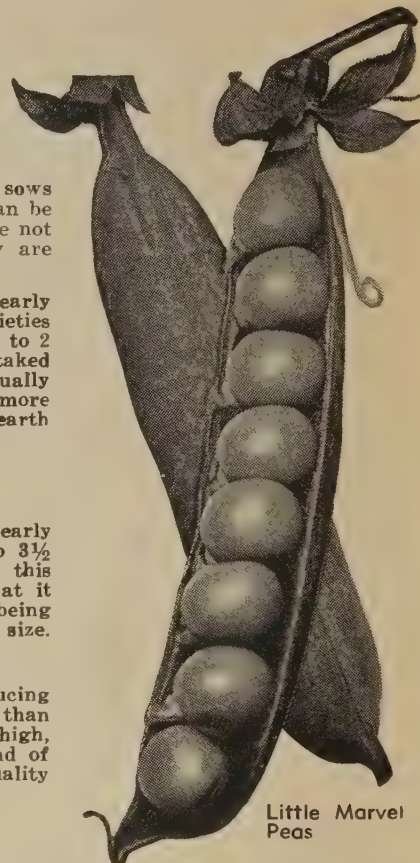
Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

INOCULATION FOR PEAS

Increase your yields of Peas by treating the seeds before planting with

NITRAGIN INOCULATOR

Easily done. We have it put up in convenient size for small gardens. (See page 50.)



Little Marvel
Peas

255 PREMIUM GEM. (63 days.) This has long been a favorite among early dwarf Peas. It matures a little later than American Wonder, is somewhat taller in growth and a little more prolific. Vines vigorous and productive, growing 15 to 18 inches high; pods 2¾ inches long, crowded with Peas of fine quality.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

256 WORLD'S RECORD. (60 days.) 36 inches. An enormously popular, large-podded, extra-early wrinkled Pea, maturing several days earlier than the well-known Gradus. Pods are uniformly large, measuring 4½ to 5½ inches, nearly round and packed with handsome wrinkled Peas of the finest flavor.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

Midseason Varieties

257 DWARF TELEPHONE. (74 days.) Similar in general characteristics to the well-known Telephone. Pods 4½ to 5 inches long, dark green; Peas large, of superior quality, tender and sweet. Vines 3 ft. high.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

258 ALDERMAN. F. (75 days.) This is really an improved Telephone, and is by far the best variety of this type. Yields more than any other variety. The pods resemble Telephone, but are larger and better filled, while the vines are of more robust growth and more prolific. Height from 4 to 5 feet. For best results the vines should be given some support. The pods are immense, often 5 inches long and contain 8 to 10 large Peas.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

259 IMPROVED TELEPHONE. (75 days.) One of the leading Peas with market gardeners on account of its vigorous, tall growth and productiveness. Vines about 4 feet high, foliage light green, producing an abundance of pointed pods, very large and light green. Peas large, tender, very sweet, excellent flavor. A splendid sort for home gardens and profitable for market.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

EDIBLE-PODDED or SUGAR PEAS

Cook Like String Beans

These varieties have all the sweetness and flavor of fresh green Peas. When the pods are partly filled, they are prepared like snap beans; when the seeds have developed, they are eaten as shelled peas.

260 MAMMOTH MELTING SUGAR. (72 days.) Pods very large, 4½ inches long, broad, curved and twisted. When young, they are very tender, stringless and fine flavored. Vines are tall, 4½ to 5 feet high, with light foliage; are very strong growing and prolific. We strongly recommend more extensive planting of these fine quality Peas.

Pkt., 15c; ½ lb., 30c; 1 lb., 45c; 5 lbs., \$2.00.

261 DWARF GREY SUGAR. (65 days.) Pods 3 inches long, light green in color, heavily curved. Vines are about 28 inches tall. A prolific variety and best of the dwarf edible podded Peas.

Pkt., 15c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

PEPPERS

Peppers are not difficult to grow. For earliest yields sow in hotbeds and transplant to the open ground in May. Cover seed very lightly and keep the soil moist. Plants should be set about 15 inches apart in rows 2½ feet apart. If the Peppers are kept picked before they turn red, the plants will produce great numbers during the season. One ounce produces about 1,000 plants.

263 King of the North

(64 days.) Makes a tremendous yield of large, sweet Peppers. The plants are medium size, covered with large fruit similar in shape to Ruby King; but considerably earlier; rather long, narrow, tapering, flesh is thick, mild and sweet; dark green turning to rich deep red when ripe. If you have not grown King of the North Pepper be sure to plant it this season. Pkt., 15c; ½ oz., 40c; oz., 75c.

264 CALIFORNIA WONDER.

(74 days.) Resembles Chinese Giant in the large size and blocky form of its fruit, but having an extremely thick flesh not possessed by that variety. Fruit crimson, measuring 4½ inches in length by 4 inches in diameter, mild and sweet.

Pkt., 15c; ½ oz., 40c; oz., 75c.

266 CHINESE GIANT. (80 days.) An enormous variety sometimes attaining 6 inches in diameter. It is very even in shape, flesh thick and sweet. Very handsome and of superior quality for stuffing. Plants are vigorous and fairly prolific. Very highly recommended for home use and one of the most profitable to grow for market purposes.

Pkt., 15c; ½ oz., 40c; oz., 75c.

267 BELL or BULL NOSE. (64 days.) A large, early sort of mild flavor. Plant vigorous, 2 feet high, very productive, and ripens its crop early and uniformly. A splendid sort for salads, mangoes and for stuffing purposes. Color deep green which becomes bright crimson when ripe.

Pkt., 10c; ½ oz., 35c; oz., 60c.

268 RUBY KING. (68 days.) A very large and attractive sort, deep green color when young, bright red when ripe. Flesh thick and mild flavor. One of the best table sorts.

Pkt., 10c; ½ oz., 40c; oz., 75c.

269 RUBY GIANT. (70 days.) A variety of Mango Pepper, which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant, grows to large size and is very mild.

Pkt., 10c; ½ oz., 35c; oz., 60c.

270 WORLD BEATER. (70 days.) One of the best of the large varieties of Peppers. Fruit 4-lobed, 5 inches long and 3½ inches in diameter. Flesh thick, mild and very sweet. Rich deep red when ripe. Plants upright and very productive.

Pkt., 10c; ½ oz., 35c; oz., 60c.

★271 HUNGARIAN YELLOW WAX. (60 days.) An early variety that is larger and has thicker flesh than other hot Peppers. The fruits are 5½ to 6½ inches long and about 1½ inches in diameter, crumpled and hooked at the point. The color is waxy yellow when young, changing to orange and then to bright red.

Pkt., 15c; ½ oz., 40c; oz., 75c.

★272 LONG RED CAYENNE. (70 days.) A well known medium early sort, having slender, twisted and pointed fruits about 4 inches long. Extremely strong and pungent, hence valuable for seasoning. Generally known as Lady Finger Pepper.

Pkt., 10c; ½ oz., 40c; oz., 75c.

274 GOLDEN DAWN. (78 days.) A handsome, sweet, mild, yellow variety; fruit pendent, 4 inches long and about 3½ inches in diameter.

Pkt., 15c; ½ oz., 40c; oz., 75c.

276 PIMENTO. (72 days.) Also known as Perfection. The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about 2 to 2½ feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures.

Pkt., 10c; ½ oz., 40c; oz., 75c.

A. S. T. A. GARDEN SEED ASSORTMENT FOR EUROPE

A national program has been organized to enable residents of this country to send garden seed to friends abroad, where not only food for this winter, but seeds for next spring's vegetable gardens are reported to be scarce because of crop failures.

Many families in Europe and Great Britain have been relying upon vegetables from their own gardens to supplement the scanty official rations. Vacant land is available and the people generally are skilled gardeners.

Secretary of Agriculture Anderson, who recently called for twenty million Freedom Gardens to be made here next spring, has recom-

mended for export an assortment of seeds sufficient to produce 5 tons of vegetables, which will supply an average family with a full year's need in garden vegetables. Experts in the U. S. Department of Agriculture have fixed standards of quality and germination which the seeds should meet.

While the program is designed to facilitate gifts by individuals to their friends or relatives abroad, arrangements have been made whereby Church World Service, Inc., a non-profit organization, or any recognized charitable organization of the donor's own choice, will deliver these packages to needy families abroad where the donor does not wish to name any particular recipient.

FOR ONLY \$3.95,* POSTPAID

*Suggested price. Special prices in quantities of 25 or more, freight shipment.

The OFFICIAL ASTA EUROPEAN SEED ASSORTMENT—minimum quantities and germination as recommended to the American Seed Trade Association by the United States Department of Agriculture:

Amt.	Germ.
8 oz. Peas—Dwarf Garden	87%
8 oz. Bush Beans—Green Snap	83%
2 oz. Pole Beans	83%
2 oz. Beet—Garden	74%
1 oz. Carrot—Chantenay, Danvers or Nantes types	65%
1 oz. Onion—storage type	78%
1 oz. Radish—Spring	83%
1 oz. Spinach—except Virginia Savoy and New Zealand ..	69%
½ oz. Turnip—Purple Top White Globe	87%
½ oz. Rutabaga—Yellow Garden type	83%
1/16 oz. Broccoli—Green Sprouting	83%
1/16 oz. Cabbage—Early, round or flat	83%
1/16 oz. Cabbage—Medium or late	83%
1/64 oz. Cauliflower—Snowball type	83%
¼ oz. Cucumber—Pickling or early slicing type	87%

1/16 oz. Endive	78%
1/12 oz. Kale—Siberian or Scotch	83%
1/10 oz. Lettuce—Leaf	87%
1/10 oz. Lettuce—Butterhead	87%
1/16 oz. Leek	69%
1/12 oz. Parsley	69%
¼ oz. Parsnip	69%
¼ oz. Squash—Summer	83%
1/16 oz. Tomato—Second early	83%
1/20 oz. Brussels Sprouts	78%

The Donor's Name and Address will be Placed Inside of each package.

*COUNTRIES WHERE THESE PACKAGES MAY BE SENT

Albania, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, Finland, France, Germany, British Isles, Greece, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Rumania, Sweden, Switzerland, Turkey, Yugoslavia.

*Countries in bold type, including Northern France and Northern Germany, are to receive the Northern assortment which omits Squash and Tomato. The remaining countries, including Southern France and Southern Germany, are to receive the Southern assortment which omits Brussels Sprouts.

PUMPKIN

A few hills of Pumpkins should be in every garden. The quality of home-grown Pumpkins is far superior to the canned product. In addition, they make excellent food for stock and can be grown among the sweet corn at practically no extra expense.

Culture. Generally planted in corn after the last working and gathered after corn has been shocked. For field crop, plant in May or June in hills 8 feet apart, about 5 to 10 seeds to the hill and cultivate until the vines get strong; then thin out leaving 2 or 3 of the strongest plants in each hill.

One ounce plants 20 hills. Four pounds to the acre.

280 KING OF THE MAMMOTHS or POTIRON. (120 days.) An enormous flattened variety sometimes attaining 60 to 90 pounds in weight. It is especially desirable for exhibition purposes, and will find ready sale in most large cities at good prices.

Pkt., 10c; oz., 30c; ¼ lb., 90c.

281 JAPANESE PIE. (110 days.) Resembles the Cushaw Pumpkins in shape, but earlier and larger. Skin dark green, with lighter green stripes. Flesh yellowish orange, fine grained, of good flavor and quality. Weight about 12 pounds.

Pkt., 10c; oz., 30c; ¼ lb., 85c.

282 TENNESSEE SWEET POTATO. (110 days.) Medium size, of creamy yellow color with light green stripes. Flesh thick, fine grained, dry, brittle and of excellent flavor. Unsurpassed for pies and custards.

Pkt., 10c; oz., 30c; ¼ lb., 85c.

283 GREEN STRIPED CUSHAW. (112 days.) Fruit fairly large with crooked neck. Skin creamy white with green stripes. Flesh yellow, very thick, rather coarse but sweet. A productive and popular sort in most sections. Pkt., 10c; oz., 25c; ¼ lb., 65c.

286 SUGAR or NEW ENGLAND PIE. (108 days.) One of the best for the home garden. An excellent pie sort. Nearly round, 10 to 12 inches in diameter; rich orange color. Flesh thick, fine grained, very sweet. Pkt., 10c; oz., 25c; ¼ lb., 75c.

287 CONNECTICUT FIELD. (118 days.) Used for planting in corn, for stock feeding and also for making pies. Fruits often 15 inches in diameter; smooth, reddish orange, ribbed skin with orange-yellow flesh. Pkt., 10c; oz., 25c; ¼ lb., 65c.

288 KENTUCKY FIELD. (120 days.) Grown generally throughout the central section for stock feeding. Fruits very much flattened, creamy yellow color; flesh orange. Very productive. Pkt., 10c; oz., 15c; ¼ lb., 40c.



New England Pie Pumpkin

SAGE

307 BROAD LEAF. An ornamental gray-leaved plant with blue flowers. Pick the leaves when half grown, dry, and powder them. An old favorite for flavoring meat and poultry dressings. Sow in the open ground. Thin plants to 6 inches apart. Pkt., 15c; ½ oz., 60c; oz., \$1.00.

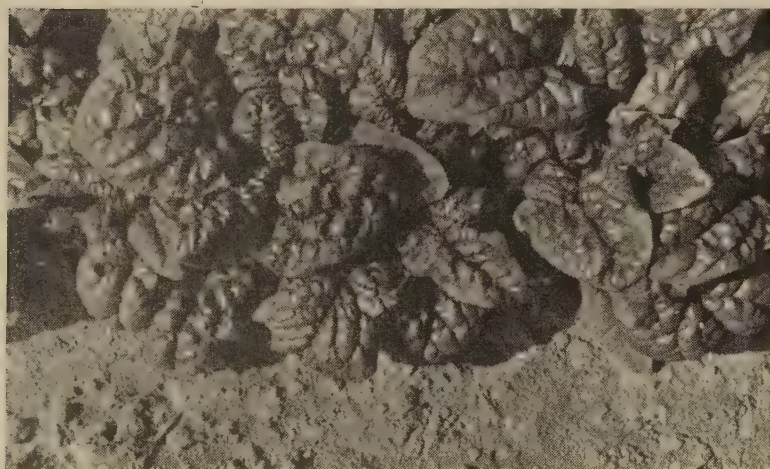
SALSIFY

Often called "Oyster Plant" and is easily grown. A desirable winter vegetable which should be more extensively used throughout the Central States. Roots are palatable and can be served boiled or as fritters.

Culture—Sow in April in rows 18 inches apart, thinning out to 4 to 6 inches. Cultivate deeply and often. It is hardy and will remain out all winter, but if desired can be dug before winter and stored in earth or sand to keep it from wilting.

One ounce sows 75 feet. Eight pounds per acre.

308 MAMMOTH SANDWICH ISLAND. (150 days.) The best sort, which is much larger and a great improvement over the old-fashioned long sort. Pkt., 15c; ½ oz., 40c; oz., 75c.



Old Dominion Spinach
Grown by Fred Meyer, Madisonville, Cincinnati, Ohio

SPINACH

Has long been one of the most popular of all greens and in some sections is grown in enormous quantities. In this locality Spinach is sown broadcast in March or April for early crop and from July to September for fall and winter crop at the rate of about 10 to 15 lbs. per acre. It can also be sown in drills 12 to 15 inches apart and cultivated.

One ounce sows 100 feet of drill. 12 pounds per acre in drills, 20 pounds per acre broadcast. One-half pound is sufficient for a medium garden.

309 Bloomsdale Long Standing F. (45 days.) Quick-growing hardy spinach extensively planted for home and market use as well as for canning. The glossy green leaves are intensively crinkled and blistered, in addition to being of a very heavy texture. Valuable for spring sowing or planting in the fall. Remains in the rosette stage for a long time without bolting.

Pkt., 10c; oz., 15c; ¼ lb., 40c.

310 OLD DOMINION. (40 days.) A Longer Standing Blight-Resistant. It has the large dark green crumpled leaf of the Savoy and stands up longer than other blight-resistant kinds. This variety yields large crops and holds up well when cut. It is a very valuable kind for spring sowing in places where spinach blights.

Pkt., 10c; oz., 15c; ¼ lb., 40c.

311 BLOOMSDALE SAVOY RESELECTED. (40 days.) A very early sort, especially desirable for fall use. Plant is upright, having glossy, thick, crumpled, pointed, green leaves. A favorite sort for market gardeners and truckers.

Pkt., 10c; oz., 15c; ¼ lb., 40c.

312 VIRGINIA BLIGHT-RESISTANT SAVOY. F. (40 days.) Developed at Virginia Experimental Station for mosaic resistance. Upright, vigorous plants, and will stand three or four days longer before bolting. A valuable variety where blight is injurious to spinach plantings.

Pkt., 10c; oz., 15c; ¼ lb., 40c.

313 NEW ZEALAND. (55 days.) The Hot Weather Spinach. An especially desirable sort for summer use as it thrives during hot weather when other spinach would fail. It has tender shoots of good quality which may be cut throughout the summer. Plant becomes very large and spreading; leaves small, broad and pointed. Plant 3 to 4 seeds in hills 2 feet apart each way. Germination will be hastened by soaking in warm water 24 hours before planting.

Pkt., 10c; oz., 25c; ¼ lb., 65c.

RADISH

Finest Seed Stocks

One ounce sows 100 feet of drill. If broadcast requires 10 pounds per acre. For forcing in frames sow in January or February. Out-of-doors, sow from March to June for early summer crop. For late, sow from July to September. Early sorts mature and are ready for the table in 21 to 30 days from sowing.

Culture. Quick growth is essential for tender, crisp Radishes. Hence, rich soil and plenty of moisture are essential. They can be sown at intervals of ten days to two weeks for early use or grown as a catch crop between rows of beets, lettuce, onions, etc.

Round Varieties

290 EARLY WHITE-TIPPED SCARLET. (25 days.) One of the handsomest of the Turnip varieties and a general favorite in nearly all large markets. It is excellent as a forcing sort or for earliest planting outdoors. Roots nearly round, slightly flattened on under side. Color very deep scarlet with distinctive white tip. Flesh white, of best quality. We strongly advise more extensive planting of this sort in this locality. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

291 EARLY WHITE TURNIP. (25 days.) Similar to Early Scarlet Turnip but little more flattened and slightly earlier maturing. It has very small tops, is of quick growth, suitable for forcing or early planting. Color clear white; flesh crisp and tender. **Pkt., 10c; oz., 25c; ¼ lb., 70c.**

294 FRENCH BREAKFAST. (24 days.) A small olive-shaped variety about 1½ inches long, which is very quick growing. Color beautiful deep scarlet shading to white at the tip. Top small. Quick maturing and splendid for very earliest crop. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

295 CRIMSON GIANT. (28 days.) This variety is suitable both for forcing or early planting out-of-doors. A remarkable feature of this Radish is that it will grow double the size of other red forcing Radishes and still remain solid. The ordinary forcing Radish, after growing to the size of 2 inches in circumference becomes pithy, while the Crimson Giant will grow to 6 inches in circumference and still remain solid and juicy. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

296 EARLY SCARLET TURNIP. (25 days.) A well-known sort producing round or oval roots of bright scarlet color. Flesh white, crisp, tender. Tops medium, quick growth; desirable for early planting. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

297 Early Scarlet Globe

(22 days.) One of the very best and most showy Radishes for earliest forcing or growing outside. Roots are slightly olive shape, rich bright scarlet color; flesh white and tender. It is fit to pull very early and is especially desirable for market gardeners on account of the showy qualities.

Pkt., 10c; oz., 20c; ¼ lb., 50c.



Early White-Tipped Scarlet

Fall Radishes

302 LONG BLACK SPANISH. (55 days.) A favorite late sort, producing long, thick, almost black roots, with white flesh of fine texture. Decidedly pungent but well flavored. Roots are usually 7 to 9 inches long, 2 to 3 inches in diameter, and it is one of the best of the long sorts and especially adapted for winter use. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

303 CHINESE ROSE WINTER. (50 days.) A popular sort producing cylindrical roots, stub-rooted, blunt at both ends. Is bright, deep rose color shading to white. Skin smooth, flesh white, crisp, tender and pungent. Roots usually 4 to 5 inches long. 1½ to 2 inches in diameter. Splendid for fall and winter. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

304 CHINESE WHITE WINTER (Celestial). (55 days.) A large, stump-rooted Radish with white skin and flesh. Can be sown from July 1st to August 15th, and will keep in prime condition a long time; mild in flavor, brittle and never woody. Fine for market gardeners. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

305 CALIFORNIA MAMMOTH WHITE WINTER. (58 days.) A giant fall and winter variety. Roots from 9 to 12 inches long, 2 to 3 inches through, tapering regularly to the tips, smooth and cylindrical in form; skin and flesh white, tender and crisp. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

306 ROUND BLACK SPANISH. (55 days.) Roots globe-shaped; 3½ to 4 inches in diameter; skin somewhat roughened, black; flesh white, firm, crisp, and pungent. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**



White Icicle Radish



Cincinnati Market

Long Varieties

298 Cincinnati Market

(27 days.) A popular sort in this section and has long been a favorite with market gardeners. It is brilliant crimson with white slightly tinged flesh, exceedingly sweet and tender. Grows 6 to 7 inches in length, straight and smooth and does not become hollow and pithy until very old. A fine sort for either market or home use. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

299 LONG SCARLET SHORT TOP. (27 days.) An old standard sort, excellent for home garden or market. Tops short and small. Roots smooth, tender, uniform shape; attractive bright red color. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

300 WHITE ICICLE. (27 days.) The earliest of the long white varieties which is popular for forcing and earliest outdoor or early summer crop. It is productive and of excellent quality, crisp and tender. Roots are usually 5 to 6 inches long and about ½ inch in diameter with small tops. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

301 WHITE STRASBURG. (40 days.) A long, white Radish for summer use. Even when small it is fine quality; remains crisp and tender much longer than other varieties. Roots 1½ to 3 inches thick, 5 to 6 inches long, tapering. Tops medium; roots smooth, crystal white; handsome, showy, crisp and tender; desirable for market or family use. **Pkt., 10c; oz., 25c; ¼ lb., 65c.**

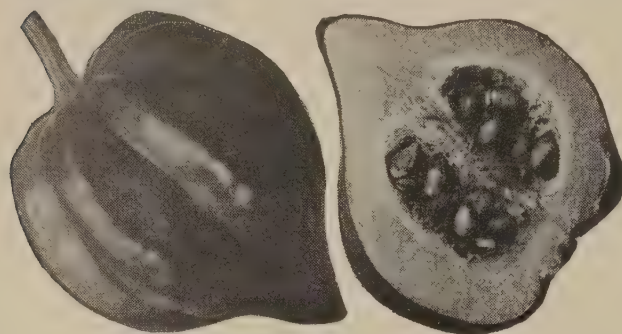


Table Queen Squash

TOBACCO

Culture. The seed is sown from February to April in open beds. Ground must be clean, very finely pulverized, raked fine and smooth. It is customary to burn over the top of the bed by piling brush or litter to destroy weed seeds and add fertility for the young plants. After sowing, beds are protected with thin cotton cloth, similar to cheese-cloth, to protect them from Tobacco flies. About June 1st the plants are set in rich or highly fertilized ground in rows 4 feet apart each way. An ounce sows about 50 square yards, sufficient to set 2 or 3 acres.

FERMATE: Spray with FERMATE to control blue mold in seed beds. Circular on request. See page 58.

328 ROOT-ROT RESISTANT STAND-UP WHITE BURLEY No. 16. Developed by the Kentucky Experiment Station. Suitable for all tobacco growing sections, it is a heavy yielder. The stocks are large and strong, holding the leaves well above the ground. It is easy to cure and produces rich bright colored leaves. **Pkt., 20c; ½ oz., 60c; oz., \$1.00.**

329 KELLY'S IMPROVED TYPE WHITE BURLEY. A heavy yielder of rich, bright leaf, large, long and broad. **Pkt., 10c; ¼ oz., 25c; oz., 75c.**

330 JUDY'S PRIDE TYPE WHITE BURLEY. The leaf is broad, long and tapering, with prominent white ribs. The stalk is strong and holds the leaves well up off the ground. **Pkt., 10c; ¼ oz., 25c; oz., 75c.**

TURNIPS

Culture. For early use, sow in March or April, either broadcast, or in drills, using preferably Milan or Purple Top Strap Leaf or Globe.

Turnips for main crop are sown from July to September 15th, broadcast 1½ to 2 lbs. per acre. An ounce will sow about 300 feet. Turnips for greens can be sown as late as October 1st, and require 2 lbs. per acre.

365 EARLY PURPLE TOP MILAN. (40 days.) Early variety which is very sweet and particularly valuable for sowing in early spring. Roots are medium size, plants purple, top flat. Best for private gardens and preferable to grow for early market crop. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

366 PURPLE TOP STRAP-LEAVED. (45 days.) A well known early sort which is largely used in all sections. Our stock is extra choice. **Pkt., 10c; oz., 25c; ¼ lb., 70c.**

367 PURPLE TOP WHITE GLOBE. (55 days.) A very superior strain, producing large, smooth roots, which are sweet and tender. One of the best for early or main crop use. Excellent either when young or fully matured. **Pkt., 10c; oz., 25c; ¼ lb., 70c.**

368 POMERANIAN WHITE GLOBE. (75 days.) Flesh white, firm and crisp: a very desirable variety. **Pkt., 10c; oz., 25c; ¼ lb., 65c.**

369 SEVEN TOP, FOR TURNIP GREENS. (45 days.) Used entirely for greens; popular in the South. **Pkt., 10c; oz., 15c; ¼ lb., 30c.**

Rutabaga or Swedish Turnip

Rutabagas require longer to mature than the common Turnips and should be sown earlier. To get heavy crops of large Turnips sow the seed June 15 to July 1, in rows 2 to 2½ feet apart. Thin the plants to a foot apart. Rutabagas make excellent winter feed for sheep. For table use, Rutabagas can be sown later and will be of better quality, but not as large as when sown early.

370 AMERICAN PURPLE TOP. (90 days.) Our stock of this is extra choice and can be depended on by the most critical growers. Rutabagas, besides being the best food for stock, is the sweetest of all Turnips for table use. **Pkt., 10c; oz., 25c; ¼ lb., 75c.**

SQUASH

**CALLED CYMLING
IN THE SOUTH**

Summer Squash, 1 oz. to 30 hills. Winter Squash, 1 oz. to 15 hills; 3 to 4 lbs. per acre.

Culture. Plant when the weather has become settled and the ground fairly warm. Bush varieties are planted 3 by 4 feet; running varieties 6 by 8 feet; about 4 to 6 seeds per hill, and thin out later leaving the strongest plants about 3 to the hill. Hills similar to those made for Cucumber with well-rotted manure or fertilizer are best. Winter varieties may be stored in a moderately warm, dry place of even temperature.

Summer Varieties

314 COCOZELLE GREEN BUSH or ITALIAN VEGETABLE MARROW. (60 days.) This is a most delicious and fine flavored sort of Squash. The color is a deep green when young, ripening with alternate stripes of green and gold. The shape is long and slender. It is used when 10 to 12 inches long and is boiled or cut in slices and fried in butter. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

315 EARLY PROLIFIC STRAIGHTNECK. (50 days.) New high-yielding summer Squash, earlier than Giant Summer Straightneck. Plants strictly bush and compact with ample foliage, permitting close planting. Fruits straight, smooth, and of delicate creamy color; firm and usable when only 4 to 5 inches long and until 12 to 14 inches long. Quality unsurpassed. Suitable for home and market garden, and for shipment. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

316 GIANT SUMMER STRAIGHTNECK. (55 days.) This summer Squash has almost entirely replaced the Crookneck type, in both home and commercial gardens. It differs from Crookneck only in shape; the "neck" instead of being curved is straight and more attractive in appearance and much easier to pack in crates for shipping. The fruit is lemon-yellow in color—about 14 inches long and 3½ inches in diameter. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

317 EARLY YELLOW SUMMER CROOKNECK. (52 days.) An extensively used summer sort, with bush type of plant, and very prolific. Fruits curved at neck and weigh about 3 pounds. Color is light yellow at early stage and covered with warts. **Pkt., 10c; oz., 30c; ¼ lb., 85c.**

318 GIANT SUMMER CROOKNECK. (60 days.) Long, slim, pear-shaped fruits with curved necks. The flesh is firm, juicy and creamy white, early and productive. **Pkt., 10c; oz., 30c; ¼ lb., 85c.**

319 EARLY WHITE BUSH (White Patty Pan). (54 days.) Squashes are creamy white and scalloped around the edges; milk-white, deliciously flavored flesh. Widely used for stewing or boiling. **Pkt., 10c; oz., 30c; ¼ lb., 75c.**

320 MAMMOTH WHITE BUSH. (58 days.) Color is creamy white with comparatively smooth surface, somewhat flattened and scalloped. Vines are bushy, vigorous and very productive. **Pkt., 10c; oz., 30c; ¼ lb., 90c.**

Winter Varieties

321 TABLE QUEEN or DES MOINES. (58 days.) Also called Acorn. Trailing in habit, with acorn-shaped fruits, which average about 6 inches long by 4 inches wide, just right to serve one-half to a person. Color dark green, except when over-ripe, when it changes to buff. Flesh is orange color and sweet. **Pkt., 10c; oz., 30c; ¼ lb., 85c.**

322 IMPROVED HUBBARD. (105 days.) One of the best winter Squashes, flesh bright orange-yellow, fine grained, very dry, sweet and richly flavored. Fruit large, pointed at both ends; slightly warted. Skin bronze-green. Excellent keeper. **Pkt., 10c; oz., 35c; ¼ lb., \$1.10.**

323 GOLDEN HUBBARD. (100 days.) Similar to the old Hubbard excepting the skin is of a rich orange-red and heavily warted, flesh of extra fine quality. **Pkt., 10c; oz., 35c; ¼ lb., \$1.10.**

324 WARTED HUBBARD. (105 days.) Similar in fruit and shape to Hubbard except that the surface is very much warted. Very handsome in appearance and of extra quality. **Pkt., 10c; oz., 35c; ¼ lb., \$1.10.**

325 BLUE HUBBARD. (120 days.) The fruits are an attractive blue-gray color, larger than the True Hubbard. The shell is rough and very hard, so keeping qualities are good. The flesh is bright yellow-orange, fine grained, dry and exceptionally sweet. Squashes grow 15 to 18 inches long and 9 to 12 inches across; average weight 15 lbs. each. **Pkt., 10c; oz., 35c; ¼ lb., \$1.10.**

326 BANANA. (105 days.) Excellent winter Squash. Fruit 18 to 24 inches long and about 7 inches in diameter. Skin gray-blue, not so hard as that of the Hubbards. Flesh deep yellow, fine grained, dry, sweet. **Pkt., 10c; oz., 40c; ¼ lb., \$1.10.**

TAMPALA

327 TAMPALA (Tam-pal-a). A delicious green vegetable, the leaves of which are cooked and served like Spinach. It does well in hot weather. Ready to eat in 6 to 8 weeks after sowing seed. Plants 1½ feet across, 2 feet high. **Pkt., 15c; ½ oz., 45c; ¼ oz., 75c.**

SWISS CHARD SEE UNDER TABLE BEETS.
PAGE 6.

TOMATO

Culture. For earliest crop, sow in a hotbed or shallow boxes in February or March, transplanting when 2 or 3 inches high to small pots, trays or cold frames. When danger of frost is past (usually in this climate the 1st to 10th of May), set in open ground 3x4 feet apart. Tomatoes should be staked to keep the fruit from the ground and it will also help to prevent blight, mildew, and make them more prolific.

To control late blight spray every 10 days to 2 weeks with Fermate, Acme Kopper King (Fixed Copper) Acme Tomato Dust or Bordeaux Mixture. See pages 56, 57 and 58.

One ounce produces about 2,000 plants; 2 ounces produce enough plants to set one acre. For early crops sow in February; for late crops sow in open bed in April or May.

The number of days indicated represent the time required from setting of plants to picking of fruit.

Disease-Resistant Varieties

331 RUTGERS. (Certified.) (73 days.) A recent introduction by the New Jersey Experiment Station which has deservedly achieved general popularity. The fruit is large, globe-shaped, deep red, small seed cavities, and heavy cross walls. Ripens from the interior outwards. One of the finest grown and we recommend it highly. Pkt., 15c; ½ oz., 50c; oz., 90c.

332 BREAK O' DAY. (68 days.) The round, smooth fruit matures early. Color deep orange-red, very solid, and of high quality. Resistant to blight and bears abundantly. Pkt., 10c; ½ oz., 45c; oz., 80c.

333 MARGLOBE. (Certified.) (75 days.) A main crop, blight-resistant variety. Fruits are large, globe-shaped, smooth, color perfectly all over, and are deep red all through. It will stand longer after it becomes flushed than any other variety of Tomato. Resistant to Fusarium wilt and nail-head rust. Pkt., 15c; ½ oz., 50c; oz., 90c.

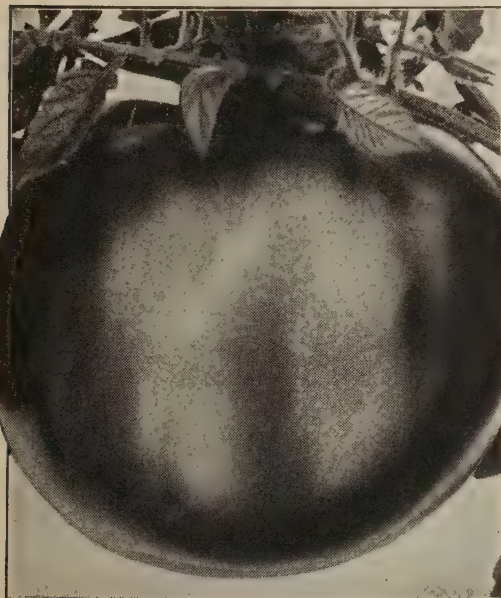
334 PRITCHARD or SCARLET TOPPER. (Certified.) (75 days.) This is one of the finest Tomatoes ever grown. The fruits are medium to large, round, flesh is thick, firm, and with small seed cavity. Brilliant red in color and have been resistant to cracking. Excellent home and market variety. Pkt., 15c; ½ oz., 50c; oz., 90c.

Early Varieties

335 VALIANT. (Certified.) (70 days.) This variety is adapted to short season areas and the early market. The fruit is large for an early variety, smooth, globe-shaped and of bright scarlet color. Pkt., 15c; ½ oz., 50c; oz., 90c.

336 STOKESDALE. (Certified.) (73 days.) Heavy yielding medium early type. Ripening at the same time as John Baer, this excellent variety has proved to be well adapted for market, shipping and canning. Fruit medium sized, with a very uniform, smooth, deep globe shape, bright scarlet color and fine quality. The fruit ripens evenly and is very free of cracks and blemishes. Pkt., 15c; ½ oz., 50c; oz., 90c.

337 BONNY BEST. (70 days.) The fruits of this desirable early sort are most attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality. Pkt., 10c; ½ oz., 40c; oz., 75c.



Marglobe Tomato

338 CHALK'S EARLY JEWEL. (70 days.) A particularly desirable sort with purplish scarlet fruit, nearly round, smooth, of large size and of most excellent quality. Fruit ripens early and is not inclined to crack, and pickings are extended over a long season. Pkt., 10c; ½ oz., 40c; oz., 75c.

339 EARLIANA. (64 days.) A deep scarlet, very early variety. Fruit is borne in clusters, is medium to large, nearly round, and exceptionally smooth for so early a variety. On account of its extreme earliness and the fact that the crop ripens uniformly and very early, it is one of the most valuable of the early sorts. Pkt., 15c; ½ oz., 50c; oz., 95c.

340 JOHN BAER. (70 days.) Similar in every respect to Bonny Best, but often a few days earlier. Fruits bright deep scarlet-red; medium large; flattened globe-shaped; smooth and firm. Pkt., 10c; ½ oz., 40c; oz., 75c.

Second Early and Main Crop

346 BEAUTY. (84 days.) A favorite sort in this locality and one of the very best for home use. It is very round, smooth, solid and of splendid flavor. Vines are vigorous and remarkably productive. Fruits of large size, very meaty; have small seed cells and are of rich flavor. Pkt., 15c; ½ oz., 55c; oz., \$1.00.

347 CRIMSON CUSHION or BEEF-STEAK. (90 days.) Is very large, round and regular; bright scarlet skin, solid flesh of best quality, seed cells small. Plants are very prolific and of fine appearance. Pkt., 15c; ½ oz., 60c; oz., \$1.10.

348 GREATER BALTIMORE. (78 days.) A heavy, thick-meated, midseason, scarlet-red variety. Large, smooth and solid. Ripens evenly. Pkt., 10c; ½ oz., 30c; oz., 50c.

349 OXHEART. (90 days.) Because of its oxheart shape, large size, as well as excellent table qualities, it has quickly come into general favor. The skin is purple and the flesh frequently shows 2 inches thick, without a seed cavity. The flavor has that delicious Tomato quality that every lover of this fruit knows so well. Pkt., 15c; ½ oz., 60c; oz., \$1.00.

350 PONDEROSA. (85 days.) One of the largest and finest varieties for home use. It is purplish pink in color. Vines vigorous, tall, fairly productive. Fruits are very solid and have exceptionally few seeds. It is fairly



Pritchard or Scarlet Topper Tomato

smooth for so large a variety and sometimes attains such a size that one slice will cover a dinner plate. Very free from acid, has few seeds, is of delicious flavor and most excellent for slicing; ripens about midseason. Most desirable for home use, and the large showy handsome fruits are popular sellers for fancy fruit stands.

Pkt., 15c; ½ oz., 60c; oz., \$1.10.

351 STONE. (85 days.) One of the very best Tomatoes, producing large, very smooth, solid fruit, slightly flattened, deep red color. It is very popular with all market growers and especially desired by canners. Ripens mid-season. On account of its large yield and general uniformity in production we strongly recommend it for both market gardens and home use.

Pkt., 10c; ½ oz., 25c; oz., 40c.

352 TRUCKERS FAVORITE. (83 days.) A large, deep purple variety, producing uniform size fruit. It is somewhat deeper color than Beauty; fruit being more globe-shaped, largely used for main crop, producing fine yields of large, smooth, solid fruits which command best prices—hence very popular with truckers and market gardeners. Pkt., 15c; ½ oz., 50c; oz., 90c.

Yellow Tomatoes

353 GOLDEN QUEEN. (82 days.) A large growing variety bearing abundantly. Fruits are golden yellow color, smooth, well shaped and desirable for slicing as a contrast with red varieties on the table. Pkt., 10c; ½ oz., 50c; oz., 90c.

354 YELLOW PONDEROSA. (86 days.) A large, mild-flavored variety. Strongly resistant to wilt. Fruits very large, golden yellow, quite solid, with small seed cells. Pkt., 15c; ½ oz., 70c; oz., \$1.25.

355 Jubilee (72 days.) Fruits are bright golden orange, deep globe-shaped, weigh about 6 ounces; the orange colored interior is modern, thick-walled, with few seeds and most attractive when sliced. The juice is rich, orange colored, full flavored and really delicious. Very high in Vitamins A and C. The plants bear over a long season. Pkt., 15c; ½ oz., 60c; oz., \$1.00.

Small Fruited Tomatoes

For preserves, pickles and decorative purposes.

356 RED PLUM. (75 days.) Pkt., 15c.

357 RED CHERRY. (75 days.) Fruits small, round, rich deep red. Pkt., 15c.

358 RED PEAR. (75 days.) Pear shape; about 2 inches long. Pkt., 15c.

359 YELLOW PEAR. (75 days.) Pear shape, about 2 inches long. Pkt., 15c.

360 YELLOW PLUM. (75 days.) Fruits oval; about 2 inches long; clear deep yellow. Pkt., 15c.

New and Better

1501 Cosmos, Radiance

Silver Medal All-America Selection, 1948

Radiance introduces two entirely new colors in Sensation Cosmos, striking deep rose and rich crimson, the first bicolor Cosmos ever to be developed. Neat compact erect habit. Flower of impressive size, not so cupped and larger than the average Sensation Cosmos. Long strong stems making it desirable as a cut flower. Beautiful color under artificial light. **Pkt., 35c.**

1502 Ageratum, The Golden

Flowers are closely clustered, fluffy rich yellow. Planted thickly keeps the height down to about 10 inches, making an excellent border. Is long lasting as a cut flower but for that purpose should be spaced about 10 inches apart to get longer stems. Annual. **Pkt., 20c.**

1503 Aster, Ballet Queen (Wilt-Resistant)

Early and free flowering and a delightful color, deep rose touched with salmon, assuming a soft bronze color when many flowers are massed together in sunlight. Fine for home gardens as a bordering plant since it is wilt-resistant. Extremely double, it bears $3\frac{1}{2}$ in. flowers useful for both bedding and cutting. **Pkt., 25c.**

1504 Petunia, Pink Sensation

Rose-pink with deeper veining which extends well toward the edge of the petals from the white interior of the corolla tube finely etched with brown. Flowers $3\frac{1}{2}$ inches in diameter, plants good form and extremely vigorous. Plants about 24 inches high and as much as 48 inches across. Very compact with production of many branches from a point, close to the ground. **Pkt., 50c.**

1505 Petunia, Garden Giants

Low growing ruffled Petunia, giant flowered mixture well suited to the home garden. The outstanding feature of this new variety is its satisfactory plant growth, well-rounded mounds 12 to 15 inches high. Starts flowering when extremely small and continues all through the summer, holding their size and ruffling under the adverse conditions of heat and dryness. Wide variety of bright color combinations. **Pkt., 50c.**

1506 Petunia, Glowing Rose

The intense brilliance of this new rose Petunia makes it the most startling of all dwarf bedding varieties. The individual flowers are very large and of an even shade, holding the intense color right up to the last flower. Plants well rounded and uniform. Blooms early. **Pkt., 25c.**

1507 Petunia, Mrs. Dwight D. Eisenhower All-Double

The low, spreading plant habit and the profusion of pleasing, soft, mid-salmon flowers, $2\frac{3}{4}$ in. across, make this a most distinctive and appealing Petunia. **Pkt., \$1.50.**

1508 Petunia, All-Double Rose Marie

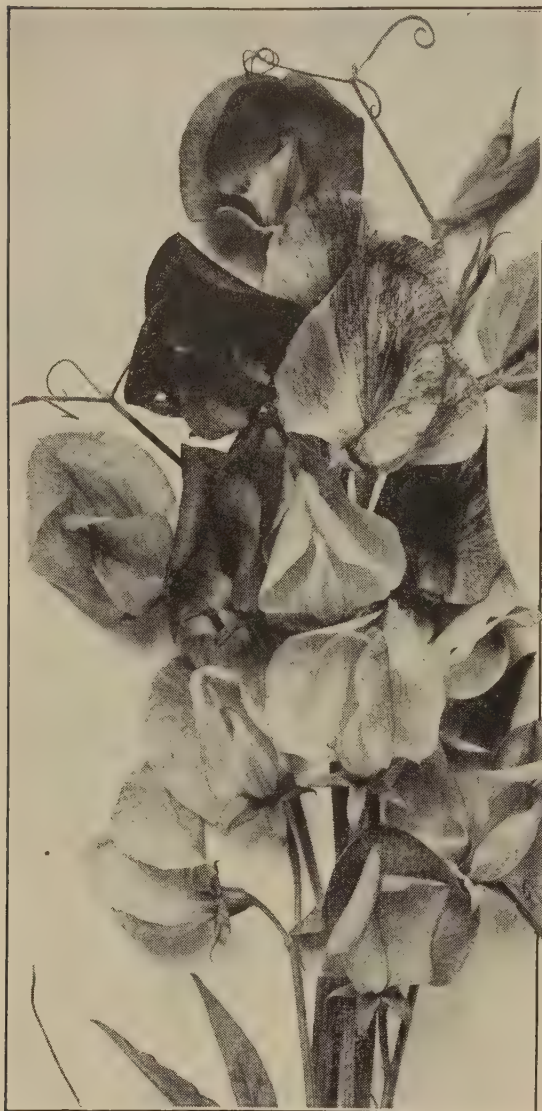
Bronze Medal All-America Selections, 1947

Rose-pink, fully double, with beautifully ruffled petals. Individual flowers 3 in. or more across. Bloom profusely on compact, dwarf plants 18 in. tall and 30 in. across. Excellent for cutting and very fragrant. **Pkt., \$1.00.**

1509 Petunia,

Ruffled Little Giants Mixed

The plants, 8 to 10 in. tall, remain so neatly compact and erect all season, making it most popular for bedding and pot plants. Medium sized, well-ruffled and waved flowers, keep the plants well covered with a mass of bloom. Colors range from deep crimson to white in almost every imaginable shade and combination, making a pleasing balance of light and dark shades. **Pkt., 35c.**



Sweet Peas, Cuthbertson Mixed

1510 Centaurea, Polar Bear

Dwarf double, white, annual. 1 foot in height; same habit as Jubilee Gem. **Pkt., 20c.**

1511 Datura, Trumpet-in-Trumpet

Showy annual about $2\frac{1}{2}$ feet in height. Large coarse leaves, but it is redeemed by its striking large cream-white flowers really consisting of 3 trumpets. As it ages the lower trumpet folds back most effectively. **Pkt., 25c.**

1512 Dianthus Heddensis, Finest Mixed

The 1946 Award Winner, Westwood Beauty, now offered in the full range of Dianthus colors. Well formed 2 in. flowers on 16 in. stems; fine for cutting, combining large open flowers with rugged growth, and more tolerant of extreme temperatures. Annual. **Pkt., 25c.**

1513 Hemerocallis (Day Lily), Peerless Hybrids

Seeds germinate readily. Very hardy, thriving in full sun but tolerating shade. Large variety of colors, some with dark shadings and many bicolor, also harmony-delights in lemon, buff, and bronze shades. Seed from large flowered hybrids. **Pkt., 25c.**

1514 Larkspur, Carmine King Improved

A new color in Giant Imperial Larkspur. Deep carmine, will hold its color under the most trying conditions. Newest and largest of the favorite Giant Imperial type. **Pkt., 20c.**

1515 Marigold, Red Head

Single flowers 2 in. across, opening a rich marogany changing with sunlight to auburn, and later to shades of bronze and gold. Plants vigorous, forming a compact row 15 inches high and 20 inches across. Dark bluish green foliage. Stems bearing the flowers are sturdy and useful for cutting if segments of the entire plant are cut rather than the individual flowers. Very effective arranged in low bowls. **Pkt., 25c.**

® 1516 Marigold, Miniature Spry

French double, early, free flowering dwarf Marigold of uniform compactness and bright color combinations. Ideal for low border. Remains in bloom and compact all summer, starting to flower when plants are very small. **Pkt., 20c.**

® 1517 Marigold, Naughty Marietta

Honorable Mention All-America Selections, 1947

New, single, dwarf French Marigold 2 to $2\frac{1}{2}$ in. in diameter. In full bloom the plants average 12 in. tall and 16 in. across, completely covered with bright golden yellow flowers attractively marked with mahogany at the base of the petals. Very showy, especially good for bedding and borders. **Pkt., 20c.**



Snapdragon, Magic Carpet

Flower Seeds

® 1518 Portulaca, Jewel, Single

Brilliant, deep crimson, popular annual, Portulaca Jewel would be a jewel in any garden. This new improved Portulaca is 4 times larger than any offered before. Thrives in dry, sunny places and will give an abundance of color during the hot summer months. **Pkt., 20c.**

1519 Nicotiana, Daylight

In this new hybrid, as the name implies, the white blooms remain fully open during the most brilliant sunshine. The plants are of bushy habit reaching a height of 1½ to 2 feet and about the same distance across, throwing an abundance of pure white bloom with the same delightful fragrance as Nicotiana Affinis. Annual. **Pkt., 25c.**

® 1520 Nicotiana, Suaveolens

Dwarf, sweet scented, pure white flowers. Fine pot plant. Annual. **Pkt., 15c.**

1521 Sweet Peas, Cuthbertson Mixed

The Cuthbertson Sweet Pea with the orthodox blossoms and vine, combines an ability to grow and bloom under hot weather conditions with exceptional vigor, length of stem and abundance of fragrant blossoms. Stems average 1 foot in length, and there is a wide range of color. **Pkt., 25c.**

1522 Snapdragon, Cherry Rose (Rust-Resistant)

New outstanding color, brilliant cherry-rose. Large flowers well placed on straight stems of long spikes. Plants base branching. **Pkt., 25c.**

® 1523 Snapdragon, Magic Carpet

Very compact with a good range of colors, including pinks, terra cotta shaded apricot, and a few purplish shades, light shades predominating. Average 4 to 6 in. high covered with miniature flowers. Excellent for rockeries, small beds and edgings. **Pkt., 25c.**

1524 Snapdragon, Tetra

The largest flowered of all Snapdragons, distinctly and attractively ruffled. Many new color combinations in solid shades and others of harmonious tone blendings. Stems very heavy. **Pkt., 20c.**

1525 Tahoka Daisy

One of the best of the blue Daisies for all-summer bloom, mid-June until November. Big blossoms of pure blue-lavender with little golden centers. Flower stems of good length, cutting and lasting qualities excellent. **Pkt., 20c.**

1526 Verbena, Salmon-Pink

New bush Verbena, plants grow more erect, making a broad, flat-topped, bushy plant about 8 to 10 inches high and 12 to 15 inches across. A row of them makes an even and uniform border closely covered over a long blooming season. Large flower heads well filled with broad petalled flowers of an unusually pleasing shade of bright salmon-pink with a white eye. Straight stems make it very desirable as a cut flower. **Pkt., 25c.**



Verbena, Salmon-Pink

1527 Zinnia, Luther Burbank

Lovely delicate pastel shades. Many self-colors, also unusual 2- and 3-color combinations. Flowers grow 5 to 5½ inches across and are composed of numerous petals which curl back somewhat to form thick flower heads 2 to 3 inches deep. Plants are strong growing, 3 to 4 feet tall, well-branched and giving an abundance of long-stemmed flowers, excellent for cutting. **Pkt., 25c.**

1528 Pansy, Steele's Butterfly

A select strain containing a wide range of colors on well-formed plants. **Pkt., 60c.**

Calendula, New Pacific Beauty Type

These new Calendula are uniformly larger flowers of better formation, longer and straighter stems, and more resistant to summer heat. Colors are clear and brilliant.

1529 Persimmon Beauty

A true Persimmon-orange of unusual brilliance and size, long wide petals with a delicate brown tipping when they first open. **Pkt., 20c.**

1530 Lemon Beauty

Of the same ideal flower and plant characteristics as Persimmon Beauty, but of the purest lemon. **Pkt., 20c.**

1531 Apricot Beauty

The attractive two-toned effect is more pronounced than ever before, together with the large flowers, long stems, and long petals of the other two new varieties. **Pkt., 20c.**

® 1532 Alyssum

Rock garden perennial. Rare species mixed. **Pkt., 25c.**

® 1533 Aquilegia, Alpina

Dwarf, color powder-blue, medium spurs. Sheafs of flowers open at once in excellent effect. Fine for rock garden or low border. Perennial. **Pkt., 20c.**

® 1534 Sweet William, Indian Carpet

Plants very dwarf and compact, 5 to 6 inches high, thus presenting all the showy colors on a uniform level. These include the large auricula-eyed forms with zones of red, scarlet, pink, and also a great number of selfs, such as crimson, scarlet, pink, and white. Planted in fall about 12 inches apart each way, the beds will display in springtime a gorgeous carpet-like effect. Perennial. **Pkt., 25c.**

1535 Sweet William, White

Enormous trusses, pure white, the individual flowers are almost twice the size of the ordinary varieties. **Pkt., 20c.**



Marigold, Miniature Spry



McCullough's Flower Seed Collections

No. 2901

A Restful Blue Garden

10-Packets—All Blue

Ageratum	Didiscus	Nigella
Anchusa	Larkspur	Petunia
Cornflower	Nemophila	Scabiosa
Cynoglossum		

Value \$1.20. **90c**
FOR ONLY

No. 2902

Dwarf Zinnia Collection

4 Distinct Varieties

Including Tom Thumb, Mexican, Fantasy, and the Navajo.

Value 65c. **40c**
FOR ONLY

No. 2903 - McCullough's Old-Fashioned Garden

10 Distinct Flowers

Balsam	Mignonette	Scabiosa
Candytuft	Nicotiana	Sweet William
Baby's Breath	Pinks	Verbena
Heliotrope		

Value \$1.20. **90c**
FOR ONLY

Collection No. 2910

9 Packets

Perennials for the Rock Garden

Alyssum	Iberis Sempervirens
Arabis	Geum
Bellis Perennis	Linum
Dianthus Plumarius	Sweet William
Gaillardia, Goblin	

Value \$1.40. **\$1.00**
FOR ONLY

No. 2904 - McCullough's Marigold Garden

7 Distinct Kinds

Including Tall, Semi-Tall, Dwarf, the French, African, Carnationed-Flowered and Chrysanthemum-Flowered types. 7 packets.

Value 75c. **50c**
FOR ONLY

Collection No. 2905

12 Packets

Most Popular Annual Flowers

Alyssum	Larkspur	Shirley Poppy
Aster	Marigold	Snapdragon
Candytuft	Petunia	Zinnia
Cornflower		
Calendula		
Hunnemannia		

Value \$1.50. **\$1.00**
FOR ONLY

Collection No. 2906

12 Packets

Annual Flowers for the Rock Garden

Ageratum	Marigold, Dwarf	Myosotis
Alyssum	Portulaca, Single Mixed	Sanvitalia
Brachycome	Zinnia, Tom Thumb	Tagetes
Candytuft		
Dianthus		
Iceplant		

Value \$1.40. **\$1.00**
FOR ONLY

Collection No. 2911

Strawflowers

Cut Flowers That Will Last a Year

Acroclinium	Helichrysum
Gomphrena	Xeranthemum

Value 40c. **30c**
FOR ONLY

No. 2907 - McCullough's Petunia Garden

10 Packets

All colors; also Bedding, Dwarf and Balcony types.

Value \$1.40. **\$1.00**
FOR ONLY

Collection No. 2908

12 Packets

Annuals for Cut Flowers

Snapdragon	Strawflower	Stocks
African Daisy	Marigold	Tithonia
Aster	Scabiosa	Zinnia, Giant
Calendula		
Cosmos		
Baby's Breath		

Value \$1.50. **\$1.00**
FOR ONLY

Collection No. 2909

12 Packets

Annual Flowers for Shady Garden

Alyssum	Cornflower	Nemophila
Snapdragon	Godetia	Nicotiana
Balsam	Lupines	Petunia
Clarkia		
California Poppy		
Chinese Forget-Me-Not		

Value \$1.50. **\$1.00**
FOR ONLY

Collection No. 2912

White Flower Garden

Brings Pleasure After Dark

9 Packets

Alyssum	Cosmos	Nicotiana
Candytuft	Verbena	Petunia
Cornflower	Larkspur	Scabiosa

Value \$1.10. **90c**
FOR ONLY

GARDEN BOOKS

THE COMPLETE BOOK OF GARDEN MAGIC

By Roy E. Biles

The Complete Book of Garden Magic offers 298 pages of garden information, with many practical illustrations in detail.

Price: \$3.50, Postpaid.

THE MODERN FAMILY GARDEN BOOK

Covers Lawns, Trees, Shrubs, Flowers and Vegetables

Price: \$1.75, Postpaid.

ANNUALS FOR YOUR GARDEN—Illustrated In Color.

By Daniel J. Foley. Price: \$1.00, Postpaid.

GLADIOLUS—In Complete Detail.
By Rockwell. Price: \$1.50, Postpaid.

GARDEN BULBS IN COLOR—275 Color Pictures. By McFarland.
Price: \$2.49, Postpaid.



McCullough's Seeds of Annual Flowers

The life of the true Annual does not extend longer than one season. Itself the product of a seed, the plant produces flowers, ripens its seed and perishes in the same year. They have many advantages. The seeds of Annuals are inexpensive, the flowers can be enjoyed both by the home renter as well as the home owner. Because of their short period of growth, they can be used to fill up gaps in the Perennial border and to succeed plantings of spring-blooming bulbs, such as Tulips, Hyacinths, etc. Annuals have a delicate beauty all their own and no plants surpass them in brilliancy for summer display. They furnish material for a whole garden, as well as cut flowers for home decoration. A succession of bloom may be had by occasional sowing of many sorts, such as Alyssum, Candytuft, Eschscholtzia, Zinnias, etc. In the latitude of Cincinnati, Ohio, these sowings may be made as late as July 1st to 15th. Another method now being used is the autumn planting of Annual seeds for early spring bloom, such as Cornflowers, Gypsophila, Larkspur, Petunias, etc. This year we have segregated the flower seeds, placing Annuals in one group, followed by Perennials and Vines. Consult the index if in doubt.

NOTE: We send out no untested seed and when failure occurs, we invariably find that the seed has been planted too deep or the soil has been permitted to become excessively dry, or the reverse, while germination is taking place.

Seeds of Annuals, unless otherwise noted, should be started indoors in a light, sifted soil with sand and humus or clean leaf-mold added. Water soil thoroughly, allow to drain, then sow seed thinly in rows. Cover with paper or glass to conserve moisture. Plant out when all danger of frost has passed. May also be sown where they are to flower, thinning out the young plants later.

All varieties marked with an ® throughout the list of Annual flower seeds are especially suitable for the rock garden.

Ageratum - Floss Flower

One of the best bedding plants, being literally a sheet of bloom from early summer till frost. Easily raised from seed started in a hotbed and in May transferred to the garden, 4 to 6 inches apart. Can also be sown outdoors in May.

®401 **MIDGET BLUE.** Very dwarf, growing 2 to 3 inches high with delicate, fine foliage, practically smothered with small, true Ageratum-blue flowers. **Pkt., 15c.**

®402 **DWARF BLUE BEDDER.** Hardy annual. Average height 4 inches. Comes very true from seed. Its habits, both flower and foliage, are very uniform. Plants are very dwarf and compact and are covered with large, deep lavender-blue flowers. **Pkt., 15c.**

®403 **BLUE PERFECTION.** Large heads of deep blue flowers in abundance. Fine for cutting. Height 12 inches. $\frac{1}{8}$ oz., 40c; pkt., 10c.

®404 **FAIRY PINK.** A dwarf compact Ageratum of a delightful soft salmon-rose-pink color. Height 5 inches. **Pkt., 15c.**

Alyssum

A fragrant edging plant with small, white flowers in great profusion throughout the summer and autumn. Useful for borders and window boxes. For Alyssum saxatile, see Perennial List.

®405 **CARPET OF SNOW.** Of creeping habit, forming a dense carpet of beautiful white flowers. Height 4 inches. $\frac{1}{4}$ oz., 30c; pkt., 10c.

®406 **TOM THUMB (Little Gem).** A splendid sort for edges, borders or rock work. Height about 6 inches. A compact mass of bloom 12 to 15 inches across. $\frac{1}{4}$ oz., 25c; 1 oz., 75c; pkt., 10c.

®407 **SWEET.** Height about 8 to 10 inches but spreading. **Oz., 60c; pkt., 10c.**

®408 **VIOLET QUEEN.** From the original white form of Alyssum some colored varieties have been developed, but none of a very decided shade. The flowers of Violet Queen are very bright violet holding its color well in the hot sun. $\frac{1}{8}$ oz., 45c; pkt., 15c.

SAXATILE COMPACTUM. See perennial page 41.

Amaranthus

Effective plants because of their brilliantly colored foliage. Flowers are interesting. Best in sunny positions on rather poor soil.

®409 **MOLTEN FIRE.** Brilliant Poinsettia-like tips. **Pkt., 15c.**

®410 **TRICOLOR (Joseph's Coat).** 2½ ft. The inner foliage is of blackest bronze, tipped with green, the outer bright scarlet and gold. **Pkt., 10c.**

Anchusa

®411 **BLUE BIRD.** A dwarf compact type, 18 inches high, with indigo-blue blossoms. Blooms freely during late spring and summer. $\frac{1}{4}$ oz., 45c; pkt., 10c. For Anchusa Italica, see Perennial List, page 41.

It is a pleasure to watch the birds feed at your window or the feedery in your garden. See page 59 for Wild Bird Feeders, Houses, and Seed.

Gorgeous Snapdragons

(Antirrhinum)

Snapdragons have been amazingly improved in size and color. They are hardy and should be sown early, as they germinate slowly. Unless very rich soil is provided and all plants are staked, the dwarf and semi-tall class will be most satisfactory in the garden. They are effective in beds of solid color, and require full sun. Keep seed pods picked off. If intended for winter flowering, cut back in September.

Rust-Resistant Snapdragons

The introduction of the New *Rust-Proof Snapdragon should be welcome news to the gardener who finds the Snapdragon among his garden favorites.

It will be a joy to see these plants with their clean healthy foliage free from rust. *Rust is that disease which causes a burned or blighted appearance on the foliage.

412 Velvet Giant The large flowers have a pronounced velvety texture, deep crimson illumined with undertone of orange-bronze. Plants are base branching, 2½ feet tall, with 6 to 12 spikes to a plant. Excellent for cutting. **Pkt., 20c.**

Rust-Resistant Super Majestic Snapdragons

A superb mixture of Majestic Snapdragons containing a fine range of color. This mixture contains many rare and new colors in Snapdragons that have not been introduced to date. This new group is superb as a cut flower, for bedding and all other purposes in the garden.

413 MIXED. Pkt., 15c; 1/16 oz., 60c.

Antirrhinum Rust-Resistant Maximum

In habit these are tall and the individual flowers are very large. Approximately 3 feet high.

414 ALASKA (Snowflake). Pure white.

415 CAMPFIRE. Luminous scarlet.

416 CANARY BIRD. Canary-yellow.

417 COPPER KING. Copper-orange to gold.

418 RED CROSS. Crimson, with white tube.

419 INDIAN SUMMER. Coppery orange-scarlet.

420 SWING TIME. Rose-pink.

421 YELLOW GIANT. Deep yellow.

Any of the above Maximum varieties: Pkt., 15c; 1/8 oz., 90c.

422 MAXIMUM MIXED. Pkt., 15c; 1/8 oz., 90c.

**Semeson
Spargon
or
Formacide
Insures Good
Seed
Germination
See pages
56, 57 and 58**



Majestic Snapdragons

Antirrhinum Rust-Resistant Majus Grandiflorum

Approximately 2 feet high.

423 MIXED. All shades. Pkt., 10c; 1/8 oz., 60c.

Antirrhinum Rust-Resistant Nanum Grandiflorum

Approximately 1-1½ feet high.

425 DU BARRY. Salmon-rose.

427 INDIAN GIRL. Beautiful old gold.

428 GARNET. Rich velvety crimson.

429 WILDFIRE. Bright orange-scarlet.

Any of the above Nanum Grandiflorum varieties: Pkt., 15c; 1/8 oz., 80c.

430 NANUM GRANDIFLORUM MIXED. Pkt., 15c; 1/8 oz., 50c.

431 ANTIRRHINUM UNIVERSITY OF CALIFORNIA MIXTURE. An excellent mixture of rust-proof Antirrhinums similar to the Majus Grandiflorum, containing a range of popular colors. Pkt., 10c; 1/8 oz., 60c.

NEW GIANT TETRA SNAPDRAGON

See page 23

AQUILEGIA OR COLUMBINE. See perennial seeds, page 42.

Arctotis

(Blue-eyed African Daisy)

432 GRANDIS. Forms much branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals, pale lilac-blue; blooms early in July and continues until hard frost. It delights in a sunny situation. Half-hardy annual. 1/4 oz., 40c; pkt., 10c.

433 ARCTOTIS HYBRIDS. These new hybrids include such lovely shades as pink, red, purple, violet, yellow and orange, all showing the characteristic blue center. Pkt., 15c.

Five Rust-Resistant Snapdragons

2422 This collection contains 1 packet each: Swing Time, Red Cross, Copper King, Canary Bird, Alaska, (value 75c), for 60c.



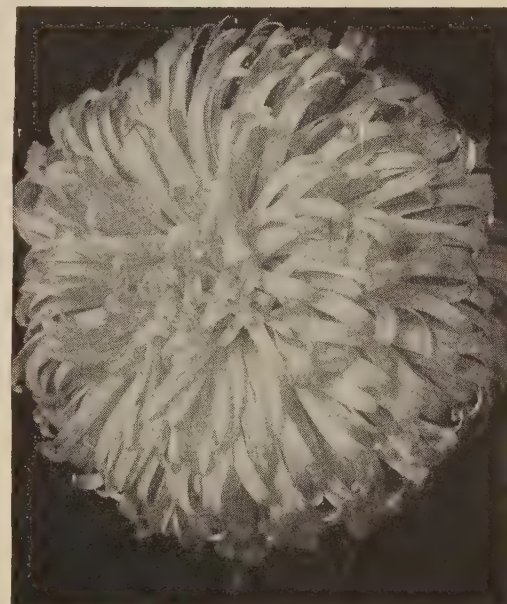
Arctotis



Wilt-Resistant Aster, Golden Sheaf



Sunshine Aster



Crego Aster

McCULLOUGH'S ASTERS — New Types and Wilt-Resistant Strains

Asters are the glory of our gardens in August and September, just when good flowers for cutting and garden display are wanted. To cut Asters abundantly as long as possible, several sowings should be made of the early and late flowering types. To succeed with Asters, sow the seed in flats in the house or hotbed in March. Transplant the seedlings two inches apart in boxes, and when they are large enough to handle, move to permanent beds in May. Make the second sowing in the cold frame the latter part of April, and the third sowing in the open ground about May. Set the plants of the early varieties ten inches apart, and of the later varieties eighteen inches apart. The richer the ground, the better your flowers will be, and water is very necessary.

SPECIAL NOTE.—While this lovely fall flower is very easily grown from seed, the greatest possible care should be exercised with the seed-bed. Old soil and boxes should never be used the second time without thoroughly sterilizing, to avoid the numerous diseases to which Asters are susceptible. Barn-yard manure should never be employed as a fertilizer; we recommend the use of fine ground bonemeal. Asters should not be grown in the same location two years in succession. Treat soil with Formacide. See page 56.

Early Giant Wilt-Resistant Aster

Finest large-flowered, heavy-stemmed, wilt-resistant Aster yet developed. Flowers are of the large Giants of California type while the plants are less than 2 feet in height. This class is early blooming, coming into flower 4 to 6 weeks earlier than Giants of California, blooming during early or mid-August.

434 EARLY GIANT MIXED. All colors. Pkt., 15c.

Aster (Wilt-Resistant) Golden Sheaf

435 GOLDEN SHEAF. Is the deepest yellow Aster yet offered, and the only one that is wilt-resistant. The flowers are fully double with an attractive crest-like center, of good substance and fine depth of petal. Pkt., 15c.

New Aster Giant California Sunshine

We now offer delightful new colors as well as the mixture in the popular Aster Giant California Sunshine group. These plants grow three feet high and bear blossoms five and six inches across on long, stiff stems.

The dual-tone color effects formed by the quilled disc and the encircling guard petals are lovely beyond description.

436 GIANT CALIFORNIA SUNSHINE MIXED. All colors. Pkt., 15c.

California Giant Asters

A new variety of the Crego type, with the robust habit of growth and long stems of the Beauty type. The flowers are much larger and more substantial than the Improved Crego. They measure 5 to 6 inches in diameter and stand up well when shipped as cut flowers. Their immense size and beauty, as well as their long and sturdy stems, make them very attractive.

437 WHITE.
438 PEACH BLOSSOM.
439 LIGHT BLUE.
440 DEEP ROSE.
441 DARK PURPLE.

PRICE: Any of the above, pkt., 15c;
1/8 oz., 50c.

442 MIXED COLORS. 1/8 oz., 50c; pkt., 15c.

2442 COLLECTION. One pkt. each of the above 5 colors, 60c.



California Giant

Heart of France Asters

443 Brilliant dark red flowers similar to the American Branching in type. Highly wilt resistant. Blooming on strong stems in later August or September. Height 2 feet. 1/8 oz., 50c; pkt., 15c.

Wilt-Resistant Asters

Wilt-resistant Asters will successfully solve your past difficulty in growing these beautiful fall flowers. Many gardeners have had to abandon all attempt to grow Asters because of wilt. No practical wilt control has yet been discovered. The following high resistant strains have been developed from plants which through several years of production under severe wilt conditions, have survived untouched. The resultant seed now makes possible perfect fall displays of this popular annual.

Wilt-Resistant Early Royal Asters

444 AZURE-BLUE. 1/8 oz., 35c; pkt., 10c.
445 DEEP ROSE. 1/8 oz., 35c; pkt., 10c.
446 PEACH BLOSSOM. 1/8 oz., 35c; pkt., 10c.
447 PURPLE. 1/8 oz., 35c; pkt., 10c.
448 WHITE. 1/8 oz., 35c; pkt., 10c.
449 FINEST MIXED. 1/8 oz., 35c; pkt., 10c.

Wilt-Resistant Crego Asters

450 ORCHID. 1/8 oz., 35c; pkt., 10c.
451 CRIMSON. 1/8 oz., 35c; pkt., 10c.
453 PEACH BLOSSOM. 1/8 oz., 35c; pkt., 10c.
454 PINK. 1/8 oz., 35c; pkt., 10c.
455 PURPLE. 1/8 oz., 35c; pkt., 10c.
456 WHITE. 1/8 oz., 35c; pkt., 10c.
457 FINEST MIXED. 1/8 oz., 35c; pkt., 10c.

Balsam - Lady's Slipper

An old-fashioned flower which is generally popular in all gardens. It bears flowers of various shades, white, pink, red, yellow, purple, etc., some of which are beautifully striped and spotted. Hardy annual.

459 **DOUBLE MIXED.** Pkt., 10c; $\frac{1}{4}$ oz., 30c.

New Bush Balsam

(Gardenia Flowered)

These bush-type Balsams are carried at the tips of the stems rather than on the side of the stems, making a show of color rather than of foliage; height 8 to 10 inches.

458 **MIXED COLORS.** Pkt., 20c.

BACHELOR'S BUTTON. See Centaurea.

BALSAM APPLE. See page 49.

BALSAM PEAR. See page 49.

Bartonia

Blazing Star or Gold Star

460 **AUREA.** A free-blooming and showy hardy annual with large yellow flowers. The foliage is gray and thistle-like, and is exceedingly brilliant in the sunshine. Thrives in a sunny situation, even in poor soil. Should be sown where intended to bloom as it does not transplant well. Height 18 inches. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Begonia

Everblooming Bedding Varieties

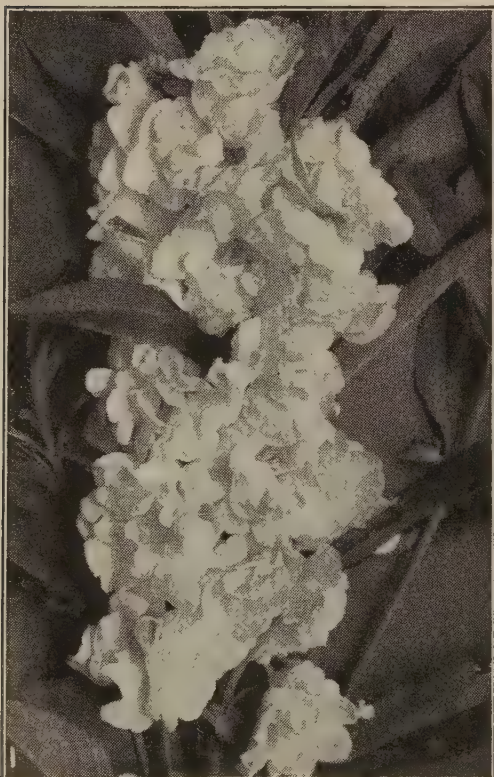
The small, bright flowers are borne in great profusion from summer to autumn. Spring seedlings bloom in summer while summer seedlings make fine house plants for the winter.

461 **CHRISTMAS CHEER.** Red, ever-blooming, with enormous, rich bright cherry-red flowers, often 2 inches in diameter. Pkt., 25c.

462 **CARMEN.** The original bronze-leaved Begonias. Bright rose-pink flowers. Pkt., 25c.

463 **WHITE PEARL.** Clear glistening white. Pkt., 25c.

464 **MIXED COLORS.** A mixture of all colors. Pkt., 25c.



Balsam

CALENDULA—Pot Marigold

Easily raised, flower quickly from seed, and bloom without interruption until hard frost. Sow where they are wanted, 2 to 3 seeds together, 12 inches apart, pull out the weakest, leave but 1 plant to grow; or start seed in hotbed in March or April and transplant outdoors in May. Frequently used for winter blooming under glass. Height 12 to 18 inches.

466 **ORANGE KING.** Beautiful rich orange. Full double flowers, borne abundantly throughout the season. Pkt., 10c; oz., 60c.

467 **DOUBLE ART SHADES.** Contains many tones and shades not previously obtainable—delicate apricots, beautiful picotees, orange shades, cream tones—every conceivable tint from pure white through cream and buff to yellow and deep orange. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

468 **BALL'S ORANGE.** Bright orange flowers, very large, with long stems,

uniformly double. A favorite on the cut-flower market. Pkt., 15c; $\frac{1}{4}$ oz., 35c.

469 **CAMPFIRE** (Sensation). Extremely large flowers, carried on long stout stems. The color is a brilliant orange with a scarlet sheen and a full yellow center. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

470 **LEMON QUEEN.** Rich lemon-yellow. Pkt., 10c; oz., 75c.

471 **MIXED.** All sorts mixed. Pkt., 10c; oz., 50c.

Brachycome Swan River Daisy

465 **IBERIDIFOLIA.** Mixed. One of the daintiest and most charming little annual flowers imaginable and easy to grow in any soil. The flowers are borne on graceful stems well above the delicate, finely laciniated foliage. They are ideal for low beds and borders, as the plants grow to a height of only 8 to 10 inches. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

BLUE LACE FLOWER. See Didiscus, page 29.

COREOPSIS (Perennial Calliopsis). See page 43.

CALIFORNIA POPPY. See Eschscholtzia, page 30.

CAMPANULA (Canterbury Bells). See page 42.

Gay Calliopsis

One of the best annuals for beds or borders, producing attractive and graceful flowers on long stems which are most effective and artistic for decoration. They commence blooming early and continue until early fall. Seeds are usually sown outdoors where they are to bloom but can be sown inside and transplanted.

472 **GOLD CREST.** A rich golden yellow with a reddish brown zone. Flowers are $2\frac{1}{2}$ to 3 inches across and are semi-double. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

473 **DWARF VARIETIES.** Mixed. Valuable for small mixed beds and borders. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

474 **TALL MIXED.** A splendid mixture comprising many varieties and a great range of colors. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

PERENNIAL COREOPSIS. See page 43.

CARDINAL CLIMBER. See page 49.

CYPRESS VINE. See page 49.

Candytuft for Mass Planting

Showy branching plant, fine for edgings, bedding, massing, rockeries or for cutting. For early blooms, sow seed inside in March, making successive sowing outdoors any time from May to July. They thrive in rich soil and should be watered freely.

476 **GIANT HYACINTH-FLOWERED or IMPROVED EMPRESS.** A wonderfully improved strain of the popular Empress Candytuft, forming much branched plants about 18 inches high. Makes a very effective white bed or border and is invaluable for cutting. Pkt., 10c; $\frac{1}{4}$ oz., 25c; oz., 75c.

UMBELLATA TYPE

Umbellata sorts grow about one foot high, with flowers in umbrellata form.

477 **FINEST MIXED.** Comprising all colors and shades. Pkt., 10c; $\frac{1}{4}$ oz., 25c; oz., 75c.

PERENNIAL CANDYTUFT. See Iberis, page 45.

Canterbury Bells

Bring Spring to the Garden in September

Annual Canterbury Bells will flower in less than six months from seed, will grow two and one-half feet tall, producing six to eight flowering spikes to the plant

475 **MIXED COLORS.** Pkt., 15c.

CARNATION

478 **ENFANT DE NICE MIXTURE.**

These are the result of a cross between Carnation Chabaud's Giant Improved and Carnation Perpetual. The plants are of robust, upright habit, with long, strong stalks bearing flowers $2\frac{1}{2}$ to 3 inches in diameter. This strain is magnificent. About 90% of the plants come double. Pkt., 15c.

479 **MARGUERITE.** A very early blooming sort which sometimes blooms in four months from sowing. Flowers are large, double, deeply fringed, very fragrant. Plants semi-dwarf, good for bedding and desirable for cutting. Annual. Finest mixed colors. Pkt., 15c.

**YOU TOO . . . CAN HAVE A
BEAUTIFUL LAWN!**

(See Inside Front Cover)



Calliopsis



Centaurea, Jubilee Gem

Clarkia

This pretty and easily grown annual has been much improved in recent years, and the mixture offered below is now seen as cut flowers in most of the large cities of Europe. They do well either in sun or shade, growing 2 to 2½ feet high, with leafy racemes of double flowers, which all open in water when cut.

493 **ELEGANS DOUBLE MIXED.** Pkt., 15c; ¼ oz., 50c.

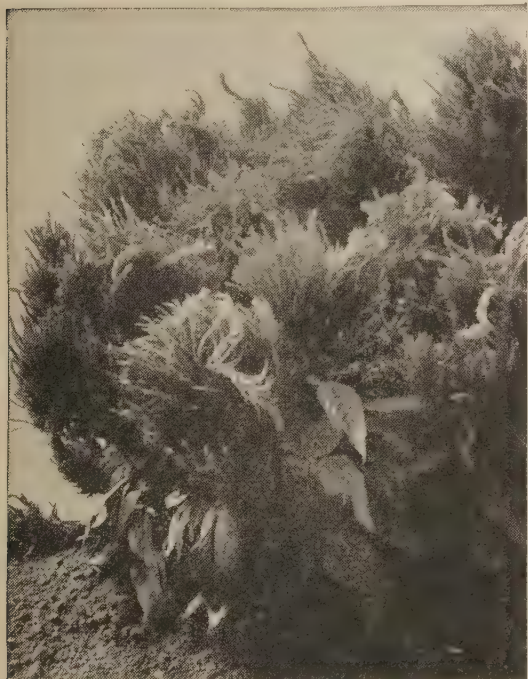
Cleome - Spider Plant

494 **PINK QUEEN.** Huge trusses of bright salmon-pink flowers. About 4 feet tall. Easily grown. Pkt., 15c.

Coleus - Flame Nettle

Fine colored, tender perennial foliage plant for house or garden. Sow indoors in March.

495 **FINEST MIXED COLORS.** Pkt., 35c.
COLUMBINE. See Aquilegia, page 42.



Celosia Plumosa

CENTAUREA

Sow outdoors in April, thin plants to stand ten inches apart, or you may sow seed from September to November for early bloom the following spring.

Double Flowering Varieties 2 ft.

483 **BLUE BOY.** Blue.

485 **PINKIE.** Deep pink.

484 **BLACK BOY.** Blackish maroon.

486 **RED BOY.** Deep red.

487 **SNOW MAN.** White.

Price, Any of the Above: Pkt., 10c; ¼ oz., 30c.

488 **DOUBLE MIXED.** Pkt., 10c; ¼ oz., 30c; oz., 90c.

489 **JUBILEE GEM.** Jubilee Gem is a dwarf variety of Cornflower making a compact plant literally covered with flowers. It has foliage distinct from all other Cornflowers, forming a tufted mass of vivid green, contrasting well with the dark but vivid double blue flowers. The plant is about 12 inches in height. Pkt., 15c; ½ oz., 25c.

Centaurea Imperialis - Royal Sweet Sultan

490 **FINEST MIXED.** A wonderful annual for cutting. Long-stemmed, exquisitely fringed and delightfully fragrant. 2 to 3 ft. May until frost. Pkt., 10c; ¼ oz., 40c.

White-Leaved (Dusty Miller)

491 **CANDIDISSIMA.** Thick silvery white leaves, sow early. Height 10 inches. Pkt., 15c; ½ oz., 50c.

Chrysanthemum

492 **RAINBOW MIXTURE.** Pkt., 15c.

Celosia Cristata Nana - Cockscomb

A free bloomer growing best in rather light, not too rich soil. Sow seeds indoors in early spring and plant outdoors in May, or sow seed outdoors in May.

480 **GLASGOW PRIZE.** Dwarf crimson. Pkt., 10c.

Celosia Childsi - Chinese Woolflower

481 **MIXTURE.** A distinct type, with large, roundish head and drooping spikelets of flowers which look like an immense ball of wool. All colors. Very showy. Pkt., 10c.

Celosia Plumosa, Heatherdell

A splendid early flowering, Dwarf Compact Celosia forming bushy plants 12 to 15 inches high.

482 **EXHIBITION MIXTURE.** Many fine new shades. Pkt., 15c.

Didiscus - Blue Lace Flower

514 **COERULEUS.** Superb for cut flowers. The long stems terminate in flat clusters of delicate blue flowers not unlike Queen Anne's Lace. Pkt., 10c; ½ oz., 40c.

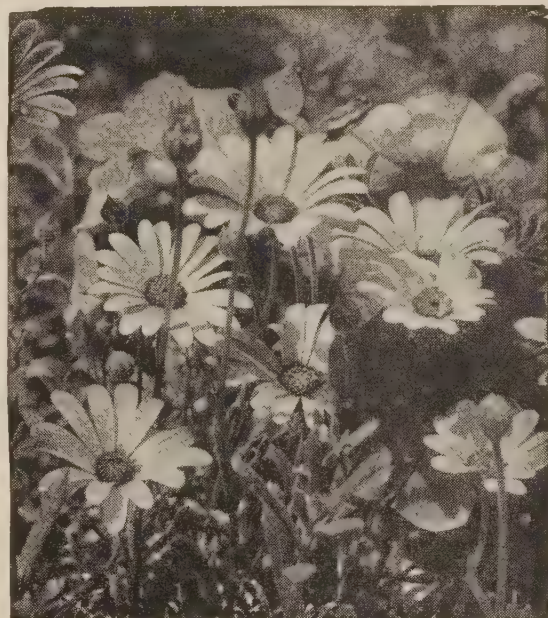
Dimorphotheca

New African Golden Daisies

Most of us know the African Daisies, sometimes called the Star of the Veldt, and have admired their bright blossoms which appear in daisy-like form 2 to 3 inches across. A showy effect is obtained by using mixed colors of African Daisies, and the dark shades of Bedding Petunias, sowing the seed broadcast or setting out the plants informally, giving the appearance of being broadcast. Delights in a sunny situation.

515 **AURANTIACA.** Golden orange, with dark center. Pkt., 10c; ½ oz., 35c.

516 **MIXED COLORS.** Varying in colors of white, yellow, salmon and orange. Pkt., 15c.



Dimorphotheca—African Daisy

Daisies

Blue-Eyed African Daisy. See Arctotis, page 26.

English Daisy. See Bellis Perennis. Perennial page 42.

Golden African Daisy. Dimorphotheca. See at left.

Shasta Daisy. See Chrysanthemum. Perennial page 43.

Marguerite Daisy. See Anthemis. Perennial page 41.

DIGITALIS. See Perennial page 44.

DELPHINIUM, Annual. See Larkspur, page 31.

DELPHINIUM, Perennial. See page 44.

For Insect and Disease Control in Gardens

use

Dupont's Garden Dust

See Page 58

Cosmos for Early Autumn Color

Graceful autumn flowers, fine for cutting and extremely showy in the garden. Very easily grown. They do best in rather poor soil.

Extra Early Sensation

The flowers of this strain are mammoth in size, 4 to 5 inches in diameter, with broad, heavy fluted petals carried on very long strong stems. It is extremely early flowering, blooming in 10 weeks from the time of seeding. The plants make a rather heavy growth of foliage, reach a height of about 4 feet, are free blooming, and while the flowers are unusually large at all times, plants may be disbudded for even larger flowers for the cut flower trade.

496 **DAZZLER**. Crimson. Pkt., 15c; ¼ oz., 35c.

497 **PINKIE**. Clear rose-pink. Pkt., 15c; ¼ oz., 35c.

498 **PURITY**. Pure white, yellow center. Pkt., 15c; ¼ oz., 35c.

499 **MIXED COLORS**. Pkt., 15c; ¼ oz., 35c.

Tall Late Mammoth Flowering

500 **GIANT MIXED**. Comprises all shades. Pkt., 10c; ¼ oz., 20c.

Early Double Sensation Cosmos

These new Double Cosmos are extra early flowering and have the mammoth Sensation type form of flower, which will average between 4 and 5 inches in diameter. The plants grow about 38 inches tall, throwing about 15-inch stems for cutting. Each plant is a heavy producer of flowers, with thrifty foliage, and will continue flowering over a very long period.

501 **PINK LADY**. Pkt., 20c.

502 **WHITE CLOUD**. A beautiful soft white, especially recommended for florists; producing approximately 60% double which is an unusually high percentage for Cosmos. Pkt., 20c.

503 **DOUBLE SENSATION MIXED COLORS**. Pkt., 20c.

504 **EARLY ORANGE FLARE**. Height 2½ ft. Orange flowers. The stems are long and wiry, well adapted for cutting. Pkt., 10c; ¼ oz., 35c.

505 **YELLOW FLARE**. Bright clear yellow. About 2½ inches across on 3-foot stems. Pkt., 10c.

Cynoglossum - Chinese Forget-Me-Not

506 **FIRMAMENT**. Firmament is as easy to grow as any hardy annual. It is compact and free flowering. Flowers resemble those of forget-me-nots and are bright indigo-blue in color. Hardy annual, height 1 to 1½ ft. Pkt., 15c.

Grow Dahlias from Seed

While usually grown from roots and cuttings, fine flowers can be produced in one season from seed, if it is sown early indoors and the plants set out when the ground is warm.

507 **DOUBLE MIXED**. Special strain of large-flowering Dahlias. Pkt., 40c.

508 **UNWIN'S DWARF HYBRIDS**. This is a beautiful strain bearing semi-double flowers with an excellent range of color including pink, lavender, red, orange, yellow and maroon. From seed sown in the spring, plants begin flowering in the summer and improve until killed by frost. They grow 2 to 3 feet tall, and abundant flowers cover them. Tubers are produced which can be saved for the next year. They make good pot plants when pinched back. Pkt., 20c.

FOR DAHLIA ROOTS: See page 53.

Dianthus - Annual Garden Pinks

Every garden should include some of the pinks because they are so easily grown and make such a wonderful display with their bright colored flowers. The plants are covered with sweet scented flowers all during the summer. Grows about one foot high.

509 **FIREBALL**. An extra double, brilliant dark red, old-fashioned, fragrant Pink. Seed sown in spring will bloom quickly and continue until frost. Height 1 foot. Pkt., 15c.

510 **GAYETY**. Large, single, fringed flowers in a wide range of lovely colors, blooming over a long period. Height 1 foot. Pkt., 15c.

511 **SWEET WIVELSFIELD**. This remarkable hybrid is quite distinct in method of flowering and height of growth from the Annual Sweet William. It has a great variety of color and a very long season of bloom. Pkt., 10c.

512 **HEDDEWIGI** (Single Pink). A splendid mixture of single flowers of brilliant shades, brilliantly marked. Plants dwarf and very free-flowering. Pkt., 10c; ¼ oz., 50c.

513 **HEDDEWIGI, FL.-PL.** (Double Pink). Very double, with deep fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. Pkt., 10c; ¼ oz., 50c.

FOR PERENNIAL VARIETIES, see page 43.



Cynoglossum, Firmament

Eschscholtzia (CALIFORNIA POPPY)

Easily grown from seed sown outdoors where they are to grow as they cannot be transplanted. They succeed everywhere, are always in bloom, brighten the garden from June until frost. Autumn sowing outdoors gives you spring flowers.

517 **SPREADING VARIETIES**. Single mixed. Pkt., 10c.

518 **ERECT VARIETIES**. Single mixed. Pkt., 10c.

Euphorbia

Strong growing annuals, suitable for beds of tall growing plants or mixed borders. The foliage is exceedingly ornamental. Sow outdoors in April.

519 **VARIEGATA** (Snow-on-the-Mountain). Elegant, bushy plants, with broad green leaves, veined and margined with white. Attractive foliage. Height 2 feet. Pkt., 10c; ¼ oz., 40c.

Feverfew - Matricaria

520 **MIXED**. Hardy annual, free flowering. For bedding or pot culture. Showy double white and yellow flowers. 18 inches. Pkt., 15c.

Four O'Clock (MARVEL OF PERU)

Old-fashioned flowers which are borne on erect, bushy plants, 2 to 3 feet high. Flowers are large, tube-shaped, opening in the afternoon and remaining open all night, and close again in the morning. Very desirable for borders and backgrounds for lower growing plants. Hardy annual.

521 **MIXED**. Comprises all shades. Pkt., 15c; oz., 60c.

FORGET-ME-NOT. See Myosotis, pages 32 and 46.

FOXGLOVE. See Digitalis, page 44.

SOW
 ACME SUPERFINE
 LAWN SEED 99.90% free from weeds
 (See inside Front Cover)

Gaillardia - Blanket Flower

One of the most profuse blooming annuals in the flower garden. Excellent for cutting as well as for beds and borders. Blooms continually from early summer until frost. Grows best in full sunlight. Height 12 to 15 inches.

522 INDIAN CHIEF. Single; brilliant bronzy red. Pkt., 10c; ¼ oz., 50c.

523 DOUBLE MIXED. Pkt., 15c; ¼ oz., 50c.

524 SINGLE MIXED. Pkt., 10c; ¼ oz., 50c.

PERENNIAL GAILLARDIA. See page 45.

Globe Amaranth

(GOMPHRENA)

An everlasting, with beautiful colored flowers resembling clover-heads. They retain their color and are lovely in winter bouquets.

525 MIXED COLORS. Pkt., 10c.

Godetia - Satin Flower

Attractive, hardy annuals, deserving more extensive cultivation, especially in the cooler parts of the country. The plants bloom profusely, and bear showy flowers, not unlike an Azalea, of satiny texture, in many rich and varied colors. They do best in a rather poor soil. 1 foot.

526 DWARF SINGLE EXQUISITE MIXED. Pkt., 10c.

Gypsophila - Baby's Breath

Quick-growing, producing great numbers of small flowers in loose, graceful sprays. Valuable for cutting; fine for mixing with other flowers. Blooms quickly from seed and liberal sowings should be made every three weeks from April to July to cut continuously. For early spring flowers sow previous autumn.

527 ELEGANS ALBA (True Covent Garden Strain). A grand improvement, flowers large and pure white. Oz., 30c; 4 ozs., 90c; pkt., 10c.

528 ELEGANS DELICATE PINK. Pretty blush-pink form of the above and equally valuable for cutting. Oz., 50c; pkt., 10c.

FOR PERENNIAL GYPSOPHILA, see page 45.

Helichrysum - Strawflower

For Winter Bouquets

A Strawflower of the easiest culture; one of our best "Everlasting" flowers. The dried double bloom being very handsome in winter bouquets. 2 feet.

529 DOUBLE MIXED. Pkt., 10c; ¼ oz., 50c.

Heliotrope

530 LARGE FLOWERED HYBRIDS. A mammoth flowering variety having enormous quantities of flowers and trusses sometimes measuring 10 to 12 inches across. Very fragrant. Colors vary from pure white through the various shades of blue and purple to indigo. Pkt., 20c.

Larkspur - Annual Delphinium

Tall showy plants that bloom freely during the summer months. They are very gay and especially useful for massed bedding and cutting. Blooms quickly from seed.

Giant Imperial Larkspur

A new type of Annual Larkspur, developed in California. These Larkspurs are ideal for cut flowers, as the flower stems, three to four feet long, branch from the base of the plant. (See illustration).

535 BLUE BELL. Medium blue, deeper than sky-blue, yet much lighter than lilac, a color up to this time lacking in the Giant Imperial type.

536 BLUE SPIRE. Intense deep Oxford-blue.

537 BRILLIANT ROSE. Salmon-rose suffused carmine.

538 CARMINE KING. Deep carmine-rose.

539 EXQUISITE PINK IMPROVED. Soft pink shaded salmon.

540 GLORIA IMPROVED. A rich tone of deep rose with no trace of carmine.

541 LILAC KING. Beautiful blue color.

542 LOS ANGELES IMPROVED. Color brilliant rose on salmon.

543 ROSALIND. Rose suffused salmon.

544 SWEET LAVENDER. Rich lavender.

545 WHITE KING. Pure white. Early.

Any of the above: Pkt., 15c; ¼ oz., 65c.

546 IMPERIAL MIXTURE. Mixture of above named varieties. Pkt., 15c; ¼ oz., 60c.

PERENNIAL LARKSPUR. See Delphinium, page 44.

COLLECTION OFFER

2546 GIANT IMPERIAL LARKSPURS. One packet each of Blue Spire, Carmine King, Sweet Lavender, Exquisite Pink, and White King. Five 15c pkts., 60c.

Hunnemannia

(Santa Barbara Poppy; Bush Eschscholtzia; Yellow Tulip Poppy).

531 SUNLITE. A double-flowered Poppy which is different. Its extra band of petals is produced on the outside, rather than the inside of the tulip-shaped flowers, giving the impression of being open even after the blossoms have closed for the night. Flowers bright canary-yellow, and the foliage of the 2-ft. bush is light grey-green. Like a sunny position in well drained soil; flower freely in late summer. Pkt., 10c.

Kochia

Mexican Fire Bush

532 CHILDSI. A quick growing foliage or hedge plant which forms symmetrical globe-shaped plants about 3 feet high. The foliage is cypress-like in appearance, being finely cut, clear green color. Early in the fall it is covered with innumerable little flowers which cause the plant to take on a reddish tinge, hence the name of Fire Bush. Seed can be started early indoors and transplanted, or sown in open border and transplanted or thinned out. Annual. Oz., 35c; pkt., 10c.

Lantana

Half-hardy greenhouse or bedding plants constantly in bloom, bearing miniature verbena-like heads of orange, white and rose. Start seed indoors early.

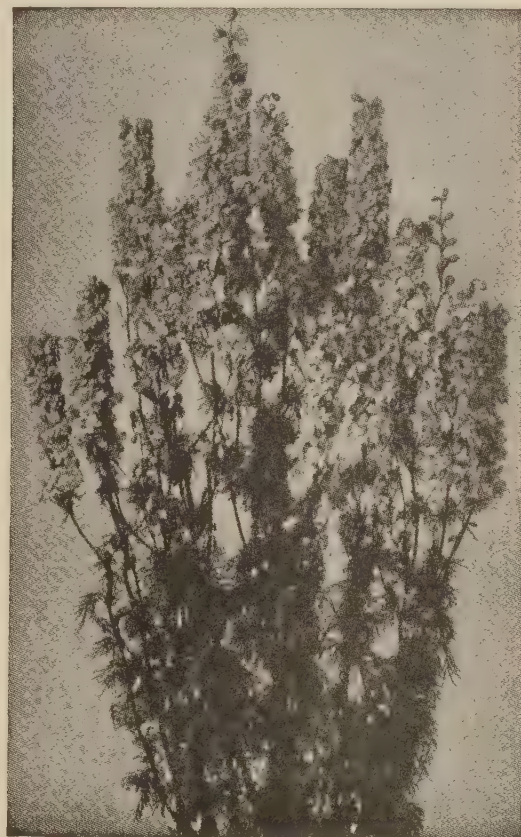
533 DWARF BEDDING HYBRIDS. Fine for bedding and pot culture. Will bloom freely all summer. Pkt., 15c; ¼ oz., 65c.

LINUM—PERENNIAL FLAX. See page 46.

Linaria "Baby Snapdragons"

Bright colored Snapdragon-like flowers. The plants are not more than 8 inches high, are very compact in habit, bearing flowers of many distinct colors such as rose, yellow, pink, lavender, carmine, red, violet, white and salmon. Excellent for bedding or for pots. Will do better when sown in boxes and planted out.

534 FAIRY BOUQUET. All colors mixed. Pkt., 15c; ¼ oz., 40c.



Giant Imperial Larkspur

Lobelia

547 CRYSTAL PALACE COMPACTA. Rich deep blue; dark foliage. Height 4 to 6 inches. ½ oz., 60c; pkt., 15c.

Lupinus

A new and greatly improved strain of annual Lupinus growing 3 to 4 ft. high.

548 HARTWEGII GIANT KING. Mixed colors. Contains all colors. Pkt., 15c.

See also Perennial varieties, page 46.

For more beautiful and luxuriant Sweet Peas and Lupinus, inoculate with Nitrugin. See page 50.

MARIGOLD. See next page.

Marigolds for Color in Late Summer and Autumn

Giant Flowered African Marigolds

- 549 MAMMOTH MUM.** The new Mammoth Mum is a Chrysanthemum-Flowered Marigold, early to flower in 2½ months from seed. Flowers 3½ inches and more across and 2 inches deep, make it the largest Chrysanthemum-Flowered Marigold. Sulphur-yellow blooms are borne profusely on upright plants. 30 inches tall. **Pkt., 15c.**
- 550 REAL GOLD.** Bronze Medal, All-America Selections, 1945. Largest of all Carnation Marigolds, with giant exhibition blooms 4½ inches and more across, very deep, very double, golden orange illumined with yellow. Plants grow 20 to 25 inches tall. Ideal for bedding. **Pkt., 15c.**
- 551 ORIOLE.** Large Carnation-flowered Marigolds. Golden yellow, 3½ to 4 inches across. Plants 2½ feet high. **Pkt., 15c.**
- 552 GUINEA GOLD.** This is a very distinct type of Marigold of graceful pyramidal habit, growing 2 to 2½ feet high, and producing 30 to 40 flowers, 2 to 2½ inches across, of a brilliant shade of orange flushed with gold. Semi-double. The characteristic Marigold odor, too, is much less pungent than in other sorts. ½ oz., 25c; pkt., 10c.
- 553 YELLOW SUPREME.** Flowers full double, creamy lemon-yellow, a little larger than those of Guinea Gold. Plants 2 to 3 feet tall, without the usual odor, and are free-blooming. A splendid companion for Guinea Gold. **Pkt., 10c; ½ oz., 35c.**
- 554 VICTORY.** A Carnation-flowered Marigold of a charming light golden or yellowish orange color. Victory Marigolds are highly prized for cutting; they grow 3 to 3½ inches across and are freely borne on strong, vigorous stems up to 18 inches in length. Plants are uniform in their upright habit of growth, 2 feet tall, and the same in spread. Its keeping qualities are excellent. **Pkt., 15c.**
- 555 BURPEE'S GOLD.** Odorless foliage, deep orange flowers. **Pkt., 10c; ½ oz., 35c.**
- 556 GOLDEN BEDDER.** This is a very early, dwarf African variety with chrysanthemum-like flowers, rich golden orange color. Golden Bedder is ideal for beds or borders. The whole plant can be cut as a bouquet. Plants 15 inches tall. **Pkt., 15c.**
- 557 ORANGE ALL-DOUBLE.** An excellent strain, producing flowers 100 per cent double. The blooms are well rounded and of an intense rich orange color. **Pkt., 15c; ¼ oz., 85c.**
- 558 LEMON ALL-DOUBLE.** Same habits as the above variety but the flowers are clear lemon-yellow. **Pkt., 15c; ¼ oz., 85c.**
- 559 AFRICAN DOUBLE MIXED.** Comprises various shades and well adapted for large beds or mixed borders. **Pkt., 10c; ¼ oz., 35c.**

Giant Flowered Marigolds

- 560 SUNSET GIANTS.** The largest type of Marigold, often 5-6 inches in diameter. Free flowering, lacking the usual Marigold odor. The flowers are loosely formed with broad, heavy petals, and come in a mixture of colors, ranging from deep orange through to light lemon-yellow. Height 3½ to 4 feet. **Pkt., 15c; ½ oz., 30c.**
- 561 ORANGE SUNSET.** Produces very large loosely formed full-centered flowers of a deep rich, lively orange. Size of flower and character of growth same as Sunset Giants described above. **Pkt., 15c.**

Marigold, Mission Giants

It is very early, coming into bloom fully two weeks ahead of the ordinary African types. Blooms 4 inches in diameter, almost a perfect ball.

- 562 MISSION GIANT, YELLOWSTONE.** A bright rich clear yellow. **Pkt., 15c.**
- 563 MISSION GIANT, GOLDSMITH.** Color a rich golden orange. **Pkt., 15c.**
- 564 MISSION GIANT MIXED.** Colors include deep, medium and golden orange as well as bright lemon. **Pkt., 15c.**

Dwarf Double French Varieties

This class of Marigolds will form dense bushes not over 12 inches high and are unequalled for borders or low beds.

- 565 GOLDEN HARMONY.** Scabiosa-flowered type of a solid golden yellow with a single row of broad guard petals, holding the same bright yellow throughout.
- 566 HARMONY.** The flowers are quite different from any other Marigold, Scabiosa-like in formation with tubular, deep orange center petals flanked by broad, velvety, dark maroon-brown guard petals. Will bloom very early.
- 567 ROYAL SCOT (DWARF) ALL DOUBLE.** A new strain of Dwarf Striped Marigold. Color is rich mahogany and gold in uniform stripes. Absolutely double.
- 568 SPRY.** Extremely dwarf and compact, being about 9 inches high and spreading 15 inches, suited for borders, edging and pots. Flowers grow 1½ inches across, double, and have a bright clear yellow crested center surrounded by several rows of mahogany-red guard petals.
- 569 SCARLET GLOW.** Scarlet turning to Tangerine.

Price, Any of the Above, Except Where Noted:
Pkt., 10c; ¼ oz., 40c.

- 570 DWARF FRENCH DOUBLE MIXED.** Comprising all shades. Very double. **Pkt., 10c; ¼ oz., 30c.**

POT MARIGOLD. See Calendula, page 28.

PIGMY MARIGOLD. See Tagetes, page 37.



Marigold, Harmony

Single French Marigolds

- 571 LEGION OF HONOR (Little Brownie).** Compact bushes 9 inches high, flowering early, continuing until frost. Golden yellow, marked with a large spot of velvety crimson at the base. **Pkt., 10c; ¼ oz., 25c.**

- 571A FLASH.** Earliest of all Marigolds, continues profusely all summer and fall. Colors range from vivid red through bronze and tangerine. A French hybrid, with single flowers 1½ inches and more across. Plants grow 18 inches tall. **Pkt., 15c.**

Marigold, Dwarf Gigantea

- 572 POT O' GOLD.** The plants are dwarf and compact, growing 12 to 15 inches in height, well branched, very neat in appearance and bearing a dozen or more of its large blooms at a time. Individual blooms are 4 to 4½ inches in diameter and the color a most penetrating shade of bright deep golden orange. Early. **Pkt., 15c.**

- 573 BUTTERBALL.** Clear yellow. Very dwarf; early and continuous flowering. **Pkt., 15c.**

- 574 SUNKIST.** Orange. Dwarf, compact, very early, long blooming. **Pkt., 15c.**

Myosotis - Forget-Me-Not

The following variety of Myosotis is a biennial, and best treated as an annual, as it will bloom the first year from seed. For early spring flowers, sow seed in August. Protect the plants or winter them over in a cold frame like Pansies, or seed may be sown in a hotbed or cold frame in the spring, and they will commence blooming in July. A cool, half-shady place is suitable.

- 575 ALPESTRIS, INDIGO COMPACTA.** Very early, bright blue, compact habit. **Pkt., 15c.**

Mignonette - Reseda

Its sweet, delicate fragrance makes this a favorite annual in every garden. Sow in May in the borders or any sunny spot where plants are to remain.

- 576 LARGE FLOWERING SORTS.** Special mixture of many shades. **Pkt., 10c; ¼ oz., 40c.**



Marigold, Guinea Gold

Double Nasturtium

Nasturtiums will really grow on soils incapable of supporting many other plants, and are most useful on dry, sandy, or gravelly banks. In very dry seasons the Tall sorts have a tendency not to run on a poor soil, and if a trellis is to be covered quickly the plants should be encouraged by watering in the early stages of growth; in wet seasons the Dwarfs have a tendency to run and to produce more leaves than flowers, and they should therefore be sown on as poor a soil as possible.

Double Sweet Scented

These Nasturtiums are of a vigorous bushy habit, producing a few short runners which are thickly studded with long-stemmed double blooms.

577 GOLDEN GLEAM. Golden yellow.

578 SCARLET GLEAM. Fiery scarlet.

Either of the above varieties:
Pkt., 15c; oz., 35c.

579 GLEAM HYBRIDS. Containing all colors. Pkt., 15c; oz., 35c.

Dwarf Double Gem Varieties

A dwarf compact strain of sweet scented double Nasturtiums. Plants are compact and entirely without runners.

580 GOLDEN GLOBE. Golden yellow flowers, very compact. Pkt., 15c; oz., 45c.

581 SCARLET GLOBE. Fiery scarlet. Pkt., 15c; oz., 45c.

582 DWARF DOUBLE GEM MIXTURE. Contains an excellent mixture of yellow, orange, scarlet, salmon, cerise, cream and maroon, both light and dark foliage. Pkt., 15c; oz., 45c.

Single Dwarf Nasturtiums

Height, 1 foot

583 DWARF MIXED. Comprises all varieties and shades. Oz., 30c; ¼ lb., \$1.00; pkt., 10c.

Single Tall Nasturtiums

584 TALL MIXED. Comprises all varieties and shades. Oz., 30c; ¼ lb., \$1.00; pkt., 10c.

Nemophila - California Blue Bell

585 INSIGNIS BLUE (Baby Blue Eyes). Splendid trailing annual, 6 inches high, fine for edging borders, or rock gardens. Cup-shaped, sky-blue flowers from late spring until frost. ¼ oz., 35c; pkt., 10c.

Nicotiana

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia, but with a longer tube. The flowers open toward evening and emit a powerful perfume.

586 CRIMSON BEDDER. The flowers are a rich deep carmine. Plants are of dwarf, pyramidal habit, not over 15 to 18 inches in height; therefore very effective for mass bedding or for planting in small groups. Pkt., 15c.

587 AFFINIS WHITE. Large, pure white, sweet-scented, star-shaped flowers 3 inches across, blooming continually, 2 to 3 ft. Pkt., 15c; ¼ oz., 35c.

588 AFFINIS HYBRIDS. Splendid mixture of blue, red and rose shades. Pkt., 15c.

FEED THE WILD BIRDS—THEY WILL HELP YOU FIGHT INSECTS IN YOUR GARDEN.

Giant Pansies

This popular annual is so well known that it needs little description. Pansies are easily grown and bloom profusely for many months. Sow the seed indoors early in March or outdoors as early as the ground can be prepared. If sown during August, and wintered over in a cold frame, the plants will begin blooming very early in the following spring and continue their showy display throughout the summer.

590 ENGLEMAN'S GIANTS. Dark and light shades, huge flowers, very compact and early flowering. Pkt., 60c.

591 SWISS BLUE (Ullswater Blue). A solid blue flower with blue-black blotches. Pkt., 50c.

592 SWISS GIANTS. This strain of Pansies is the most sensational novelty of many years. The seed we offer will produce flowers of gigantic size, perfectly round, and produce many new color combinations and shades previously unknown in pansies. Blooms early Pkt., 50c.

593 SCOTTISH EXHIBITION MIXED. Four-inch flowers of perfect form and substance. Varied color heavily blotched petals overlapping. Pkt., 60c.

594 CHOICE BEDDING MIXED. Contains a complete range of colors. Blossoms slightly smaller than the giant types. Pkt., 25c.

595 MAPLE LEAF GIANT MIXTURE. A distinct variety and quite different from other types. The leaves are of giant size and the flowers are up to 4 inches across, under good cultivation. Of wonderful substance and fine form. Many charming colors are included, both light and dark shades. Pkt., 60c.

STEELE'S BUTTERFLY PANSY MIXED. See Novelty page 23.

TUFTED PANSIES. See Viola, page 48.



Nasturtiums,
Double Gleam Hybrids

Nigella - Love-in-a-Mist

589 MISS JEKYLL. Lovely variety giving an abundance of long-stemmed flowers which are of a clear cornflower-blue, prettily set in slender, elegant foliage. One of our most attractive annuals. Height 18 inches. Pkt., 10c.

Brilliant Annual Phlox

FLAME FLOWER

For a color effect in the garden there is nothing quite so brilliant and quite so lasting. Quickly grown from seed. They succeed best in a sunny open situation, preferring a light, rich loam. For early flowers, sow seed indoors or in hotbed in March; or they may be sown in open ground from late April until July. If faded flowers are removed, they will bloom until frost.

631 NANA COMPACTA. A dwarf symmetrical plant covered with bright flowers. Mixed colors. Pkt., 15c.

Phlox Gigantea

An extra large flowering group producing flowers in a wonderful range of colors. Plants 9 inches high.

636 RED GLORY. Brilliant red with white eye. Pkt., 15c.

637 ROSY MORN. Rose-pink with white eye. Pkt., 15c.

638 SALMON GLORY. Pure salmon-pink with creamy eye. Pkt., 15c.

639 ART SHADES. All soft colors, many with lighter eye. Pkt 15c.

640 CUSPIDATA MIXED (Star Phlox). Dwarf star-shaped flowers with laciniated petals. Pkt., 15c.

PERENNIAL PHLOX. See page 47.



Petunia Garden on Crosley Estate, Kipling Road, Cincinnati, Ohio

McCULLOUGH'S PETUNIAS for All Purposes

A very useful and free-flowering annual, thriving on any soil and in the hottest weather. For a showy bed, or for porch or window boxes, few plants equal the Petunia in effectiveness. Sow the seed in pots or flats in the house or hotbed in February or March, or in the garden as soon as the soil is warm. Cover the seed but slightly, as it is very fine.

Double Flowering Petunias

ALL DOUBLE DWARF VICTORIOUS

Dwarf compact plants, covered with giant fringed double flowers, very free flowering.

596 ALL DOUBLE COLOSSAL SHADES OF ROSE. Silver Medal All-America Selection, 1946. Gorgeous Petunias produced on heavy stems, foliage very luxurious. Height 18 in. Under good cultivation the huge flowers will measure from 4 to 5 inches across. Color shades from light and salmon-pink to mostly deep pinks and purplish rose. **Pkt., 75c.**

597 AMERICA ALL DOUBLE PETUNIA. Flowers are rose-pink, of medium size, 2 inches and more across. Plants are very compact and uniform in growth, 1 foot in height and 18 inches in width. America All-Double is among the first of the Petunias to bloom and will continue to flower until frost. It is of easy culture and vigorous growth. **Pkt., 50c.**

598 ALL DOUBLE VICTORIOUS MIXED. An extra dwarf giant mixture of Fringed Petunias producing flowers 100% double. Habit very compact. The plants are remarkably uniform in habit, producing a wonderful assortment of brilliant and fancy colorings. Very free flowering; an exceptionally fine strain for pot culture as well as for bedding. Height, 12-13 inches. **Pkt., 50c.**

Large Single Flowering Varieties

599 SNOWSTORM. Extra large frilled clear white, outstanding for size and much larger than White Cloud. Snowstorm will average 4 inches in diameter. Plants medium dwarf, the finest white for either bedding or pots. Very fragrant. **Pkt., 35c.**

600 ELK'S PRIDE. Dwarf, immense flowers of rich deep Elk's purple, with large lobes forming a five-pointed star. The velvety black veins add much beauty. **Pkt., 25c.**

601 WHITE CLOUD. Pure white, very dwarf and compact. **Pkt., 25c.**

602 BURGUNDY. Large single flowers of a deep Burgundy-red enhanced by a rich velvety sheen. The throat, which is white, veined purplish red, creates a beautiful contrast. The flowers measure 3 1/2 inches across. **Pkt., 25c.**

Large Single Flowering Fringed Mixtures

603 DWARF GIANTS. (Ramona Strain.) A dwarf, sturdy growing type, especially suited for pot culture. Flowers are

beautifully ruffled and fringed with open well marked throats. The mixture contains a good assortment of the most desirable dark and light shades, which are well balanced. **Pkt., 35c.**

604 RUFFLED MONSTERS. A half dwarf type of erect and robust habit. The flowers are very large and ruffled, with open shallow throats. The colors are mostly the desirable red and dark shades, richly marked and veined. **Pkt., 35c.**

Petunia, Miniature

A strain of dwarf, compact miniature Petunias, forming plants from 6 to 9 inches high, literally smothered with flowers. Plants about 8 inches wide.

605 MARTHA WASHINGTON. Its growth is about 9 inches high, and it forms a perfect ball effect, literally smothered with lovely frilled blooms about 3 inches in diameter. Its neat, compact habit makes it suitable for borders, bedding, pots or window boxes. Color a bluish-pink veined a wine-red; throat a dark violet. **Pkt., 20c.**

FOR NEW PETUNIAS, see page 22.

Single Bedding Varieties

Growing about 12 to 18 inches high.

606 BLUE BEE. A violet-blue. **Pkt., 10c.**

607 FLAMING VELVET. Brilliant velvety scarlet. **Pkt., 15c.**

608 GENERAL DODDS. A velvety blood-red. **Pkt., 10c.**

609 HOWARD'S STAR IMPROVED. A velvety purple with a pure white star in the center of the flower. **Pkt., 15c; 1/4 oz., 60c.**

610 PEACH RED. Honorable Mention All-America Selection, 1946. Unique color of rich salmon-cerise, growing 15 inches or taller, of strong, luxuriant growth; flowers are plain petaled, of medium size, 2 inches or more across, and borne freely throughout the entire season. A new color in Petunias. **Pkt., 15c.**

611 RADIANCE. A cerise-rose with enough underlying salmon to remove the harshness. The throat is golden yellow below where the blooms start to flare. Holds its uniform, neat habit until late fall. The blooms are about 2 inches in diameter. **Pkt., 15c.**

612 TOPAZ ROSE. A fiery velvety rose that will neither fade nor burn under the hottest sun. The throat is the color of topaz. Very fragrant. **Pkt., 15c; 1/4 oz., 50c.**

613 WHITE KING. Pure white. Very free-flowering. One of the finest whites in Petunias. **Pkt., 10c; 1/4 oz., 35c.**

614 CHOICE SINGLE MIXED. A mixture of moderate sized flowers; extremely free flowering. **Pkt., 10c; 1/4 oz., 60c; 1/2 oz., \$1.00.**



Petunia, Mars

- 624 **ROSY MORN.** Dwarf, extra select. Soft carmine-pink with white throat. Pkt., 15c; 1/16 oz., 40c; 1/8 oz., 75c.
- 625 **ROSE OF HEAVEN.** A brilliant crimson-rose. Pkt., 15c; 1/16 oz., 40c; 1/8 oz., 75c.
- 626 **SINGLE DWARF BEDDING MIXED.** Includes all the varieties listed above as well as many others. Pkt., 15c; 1/8 oz., 75c.

Petunia

Single Dwarf Bedding

Varieties growing 8 to 12 inches high.

- 615 **ADMIRAL.** Rich violet-blue with waved flower on compact plants. Pkt., 25c.
- 616 **BLUE BEDDER.** Mid-blue. Pkt., 15c.
- 618 **CELESTIAL ROSE.** Improvement on Rose of Heaven. More compact in growth and deeper in color; a beautiful rich satiny rose. Pkt., 15c.
- 617 **BRIGHT EYES.** Dwarf, compact and upright, growing about 10 inches tall, covered the entire summer with small, plain-petaled flowers, 1 1/2 inches across. Rosy pink with white towards the throat. Good for bedding, edging, window boxes or rockeries. Pkt., 15c.
- 619 **CHEERFUL.** The name is acquired from the crisp, satiny sheen of its salmon-pink flowers. The plants form a mound 10 to 12 inches high with a spread of 2 feet. Growth is densely compact with no tendency whatever to thin out. Pkt., 15c.
- 620 **ENGLISH VIOLET.** A new and much more pleasing shade of violet-blue Petunia. All the flowers on a plant are the same shade and hold this uniform color from the time they first open until the last bloom. Pkt., 15c.

621 **GLAMOUR.** This variety has large salmon-rose flowers with brown veining on white in the throat; a free and continuous bloomer. There is a little variation in color shades and though mostly with wavy, fringed petals, some come plain edged and smaller in size than the 4 to 5 inches. Height is usually 15 to 18 inches. Pkt., 20c.

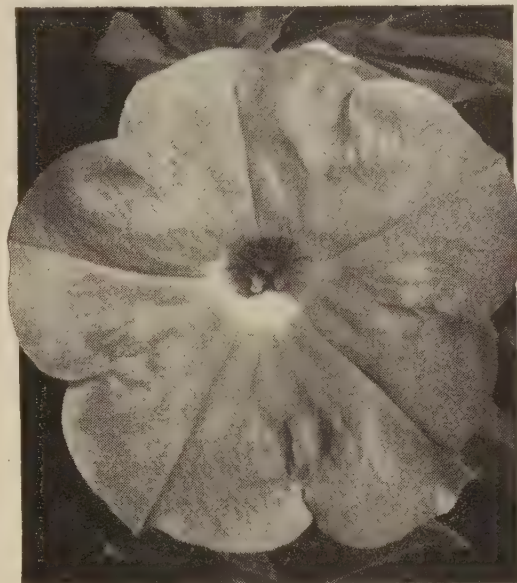
622 **MARS.** Mars is the deepest crimson and the largest flowered in the bedding Petunia class. Comes true to type and color. When grown well the flower will reach the size of 3 inches. Pkt., 15c.

623 **HEAVENLY BLUE.** Silvery light blue. Pkt., 15c.

Balcony or Large-Flowered

A splendid large and free-flowering type for window boxes, vases, hanging baskets, etc. The flowers average 3 inches across and make a very effective display over a long season.

- 627 **BLACK PRINCE.** Rich velvety crimson-red. Pkt., 15c.
- 628 **BLUE.** Velvety indigo-blue. Pkt., 15c.
- 629 **ROSE.** Brilliant rose-pink; very effective. Pkt., 15c.
- 630 **BALCONY MIXED.** A mixture of the above varieties. Pkt., 15c.



Celestial Rose

Poppies for Delicate Tints

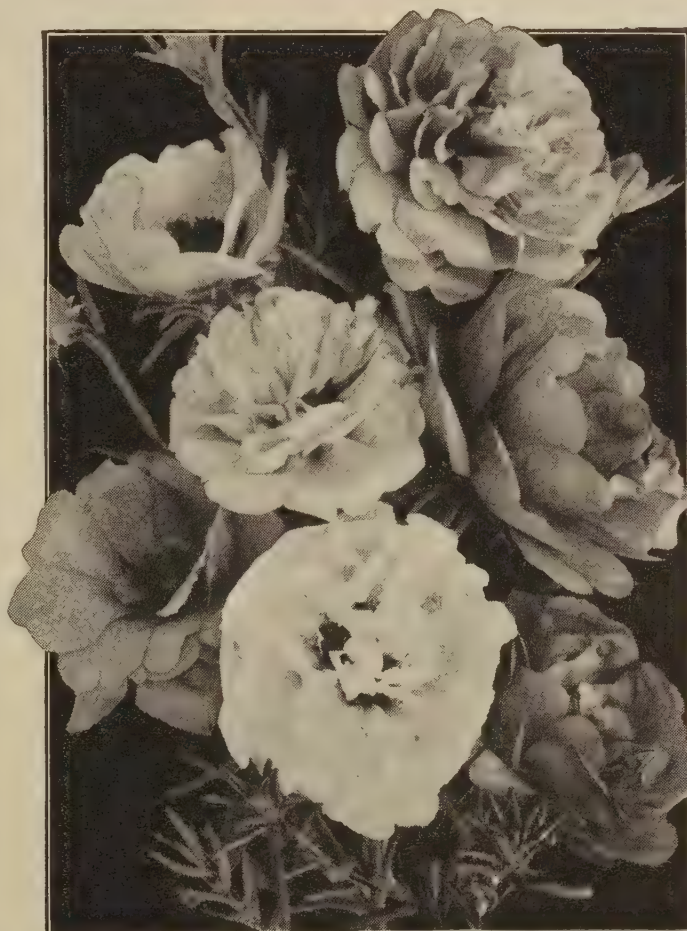
Sow seed in the fall or early spring where they are to bloom, as they are difficult to transplant. They flower quickly from seed and thrive best in a light loamy soil. Successive sowings should be made to provide continuous blooming.

Double Annual Poppies

- 641 **SWEET BRIAR.** A delightful shade of deep rose-pink. The blossoms are double, resembling a very large double Begonia. Pkt., 10c; 1/8 oz., 25c.
- 642 **DOUBLE SHIRLEY or BEGONIA-FLOWERED MIXED.** Beautiful double satiny flowers in every conceivable color. Pkt., 10c; 1/4 oz., 25c.

Single Annual Poppies

- 643 **AMERICAN LEGION.** A greatly improved English scarlet or Flanders Poppy, with very large flowers of dazzling orange-scarlet. 2 feet. Pkt., 10c; 1/2 oz., 35c; oz., 65c.



Large-Flowering Double Portulaca

- 644 **SINGLE SHIRLEY.** A beautiful sort which blooms a long season and bears large single flowers of flat but artistic shape. Most petals are of a very silky texture with an intense sheen. Others plain, some crimped, some like tissue paper and others wavy. Colors range through shades of pink, rose, scarlet, carmine, and are generally edged with lighter shades. Pkt., 10c; 1/2 oz., 35c; oz., 65c.

PERENNIAL POPPIES. See page 47.

Portulaca - Moss Rose

Portulacas enjoy the hottest, driest situation and will grow in almost any soil. Foliage is thick and succulent, like that of a Sedum, and the flowers resemble single and double Roses. They bloom most freely throughout the summer and fall. Scatter a few seeds in your rockery or anywhere to fill up empty spaces. Sow seed in May when the ground is warm and it is well to mix the seed with dry sand or soil to ensure an even distribution.

PORTULACA, JEWEL. See page 23.

Large-Flowering Single Varieties

- 647 **SINGLE MIXED.** Pkt., 15c; 1/8 oz., 60c.

Large-Flowering Double Varieties

- 648 **MIXED COLORS.** Comprises a wide range of colors. Pkt., 20c.



Salvia, Globe of Fire

Sanvitalia (Creeping Miniature Zinnia)

654 **PROCUMBENS FL.-FL.** 6 inches. Sanvitalia flowers are much like tiny zinnias, golden yellow with very dark purple centers, some single and others double. The plants are prostrate and creep over the soil instead of growing upward. They start blooming in June and continue until frost. **Pkt., 10c; 1/8 oz., 30c.**

Salpiglossis - Painted Tongue

A very showy, half-hardy annual which is desirable both for bedding and border plants. Has richly colored funnel-shaped flowers of many shades including yellow, buff, crimson and scarlet and extending through to purple and almost black.

650 **DWARF GIANT-FLOWERING.** All colors. **Pkt., 15c.**

Ricinus - Castor Bean

649 **ZANZIBARIENSIS.** Grows to immense size. Leaves sometimes measure 30 inches across and range in color from bright green to deep bronze. Choice mixed colors. **Pkt., 15c; oz., 25c; 4 ozs., 75c.**



Scabiosa

Salvia - Scarlet Sage

One of the most useful and effective bedding plants, which produces immense masses of flowers from early in the season, continuing in uninterrupted succession until frost. Blooms are borne on long spikes well above the foliage and continue in good condition a long time.

651 **SPLENDENS.** Tall growing sort with dark green foliage and bright scarlet blooms. Annual. Height 2 1/4 to 3 feet. **Pkt., 20c.**

652 **AMERICA or GLOBE OF FIRE.** This is the freest and most continuous blooming of all the Scarlet Sages, also the most uniform in habit of growth, which makes it particularly valuable for bedding or planting in lines. **Pkt., 25c.**

653 **FARINACEA** (Blue Bedder). A more compact form of the graceful Salvia Farinacea, growing about 2 1/2 feet high, and with a better habit, the plants branching freely from the base. The flowers, borne on long terminal spikes, are of a bright mid-blue, deeper than in the type, and very showy and effective. The plant is vigorous and fairly hardy, and may be had in bloom from August to October. **Pkt., 20c.**



Salpiglossis—Painted Tongue

Sweet Scabiosa (Pincushion Flower; Mourning Bride)

One of the old-fashioned popular annuals which produce an abundance of many colored flowers excellent for cutting. Blossoms are borne on long stems, are fragrant, double and somewhat the shape of a pincushion. An effective plant for bedding or borders. Seed can be sown in open border and thinned out from 1 to 1 1/2 feet apart. Grows 2 to 2 1/2 feet high.

655 **ROSETTE.** As a result of many years' selection and painstaking care, in Rosette has been created a glorious new color in Annual Scabiosa. Rosette is a beautiful shade of deep rose, heavily suffused with salmon. The flowers are extra large and the stems are long and stiff. This glorious, glowing new color will undoubtedly make Rosette a most popular flower for the garden and also with the florist for cutting. A fitting companion to Scabiosa Loveliness, Peach Blossom and Shasta, which have received Awards of Merit from the Royal Horticultural Society. **Pkt., 15c; 1/8 oz., 25c.**

656 **BLUE COCKADE.** This outstanding novelty is deeper in color, but the flowers are entirely devoid of any suggestion of rose. They are, in fact, the purest deep azure-blue that can be found in any annual. The formation of the flower is far ahead of existing varieties, and has so great a depth as to be almost conical in shape. **Pkt., 10c; 1/8 oz., 25c.**

657 **GIANT LOVELINESS.** Soft delicate salmon-rose. **Pkt., 10c; 1/8 oz., 25c.**

658 **PEACH BLOSSOM.** A beautiful shade of peach-blossom-pink, of large size and long stem. An excellent cut flower. **Pkt., 10c; 1/8 oz., 25c.**

659 **SHASTA.** A pure white of enormous size, the flowers measuring 3 1/2 inches across with extremely long stems. **Pkt., 10c; 1/8 oz., 25c.**

660 **CRIMSON.** Rich rosy crimson. **Pkt., 10c; 1/8 oz., 25c.**

661 **KING OF THE BLACKS.** **Pkt., 10c; 1/8 oz., 25c.**

662 **GIANT HYBRIDS.** A splendid sort for large beds or borders, comprises many beautiful colors. Height 2 1/2 feet. **Pkt., 10c; 1/4 oz., 30c; oz., 90c.**

Annual Sweet William

Many beautiful colors, some starred and mottled, others with clear white eyes. Named annual because plants will flower the first season if the seed is sown early. They will live over winter, however, and last for several years. 15 in. tall.

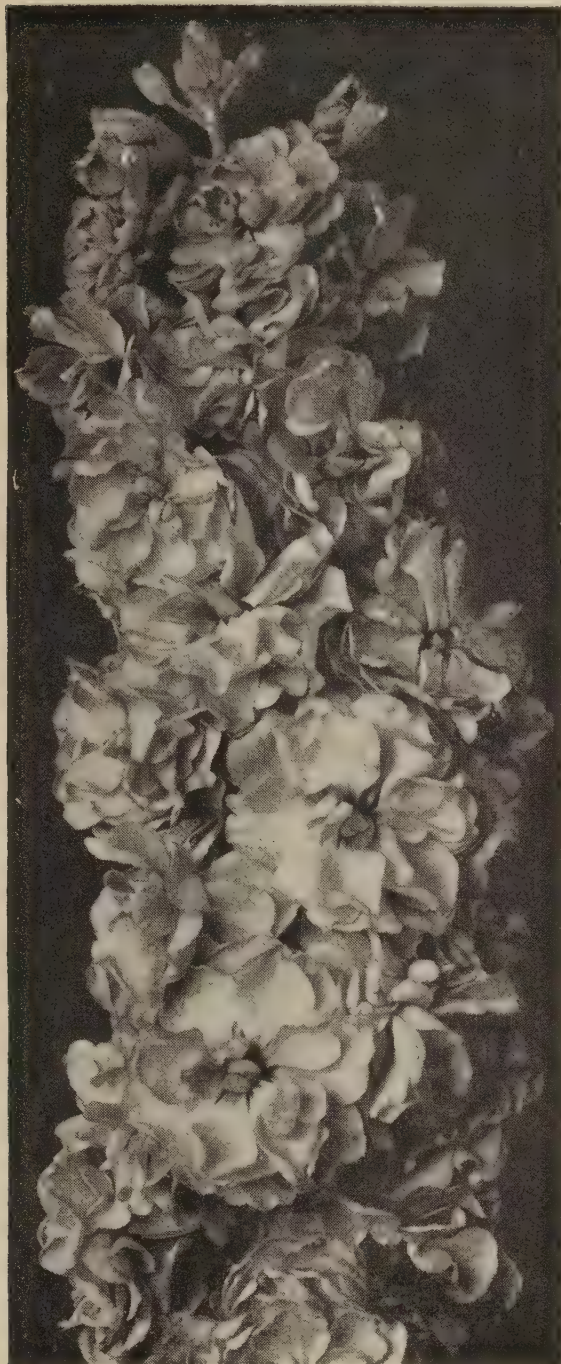
663 **MIXED COLORS.** **Pkt., 10c; 1/8 oz., 35c.**

SCABIOSA COLLECTION

2662 Contains one packet each of Blue Cockade, Peach Blossom, Crimson, Rosette, Shasta, Loveliness and King of the Blacks. **Value 75c, for 50c.**

SNAPDRAGON. See Antirrhinum, page 26.

WHEN ORDERING, SEE PAGE 64 OF THIS CATALOG



Stock, Giants of California



Sun Gold Sunflower

STOCKS—Cut and Come Again

Early Giant Imperial (Improved Bismarck)

One of the best Stocks for inside and outside planting. The plants grow in pyramidal form, covered with large double flowers.

677 GIANT IMPERIAL MIXED. Pkt., 15c.

Double Large Flowering Dwarf Stocks

Ten Weeks' Stocks

Sweet-scented, double flowers on strong spikes. Fine for the garden; 15 to 18 inches tall.

678 FINEST MIXED. All colors. Pkt., 10c; $\frac{1}{8}$ oz., 40c; $\frac{1}{4}$ oz., 75c.

Stocks, Giants of California

An excellent group which blooms very early. When planted close they grow to a height of 3 feet or more, having only a single central spike with a 15 inch stem of florets.

666 GOLDEN GATE. Yellow.

667 MONTEREY. Pink.

668 PACIFIC. Blue.

669 RED WOODS. Blood-red.

670 SANTA BARBARA. Chamois.

671 SANTA MARIA. White.

672 SEQUOIA. Rose-carmine.

673 TAHOE. Lavender.

674 YOSEMITE. Rose.

675 EXQUISITE MIXED. All colors.

PRICE: Any of the above, pkt., 15c; $\frac{1}{8}$ oz., 85c.

Sunflower - Helianthus

(Hardy Annual)

Of easy culture, and the newer sorts are among the most ornamental and effective of all garden annuals. The single flowering sorts are indispensable for cutting. Bloom early and continue until frost.

679 SUN GOLD. An improved old-time double Sunflower. Cushion-like blooms, 4 to 5 in. across. Height 5 ft. Pkt., 15c; oz., 60c.

680 TALL RED. Height, 3 to 4 feet. Flowers star-shaped of brightest golden yellow, with dark centers. They are suitable for cutting. Pkt., 10c.

Sweet Peas

Sweet Peas are among the seeds to be sown very early in the spring. They should go into the ground as soon as the soil can be worked, and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. One ounce sows 35 to 40 feet in a row. It is best to soak the seeds for several hours before they are planted. If this plan of planting early is followed, and Sweet Peas are kept mulched or else watered abundantly, they will generally give a fine crop of blooms.

Early Flowering Spencer Varieties

While these are especially adapted for forcing under glass for winter and early spring blooming, they are also valuable for outdoor culture, coming into bloom five or six weeks earlier than the regular Spencer type, and if the flowers are kept cut, they will continue to bloom for a long time.

681 MARINER. Clear marine-blue.

682 BRIDESMAID. Deep silvery pink, long-stemmed.

683 HARMONY. Clear lavender.

684 HOPE. A mammoth flowering pure white.

685 JOSIE. Extra long-stemmed clear rose-pink.

686 MAJESTIC ROSE. Rose-pink, long stems.

687 MARS. Oxblood-crimson.

688 SEQUOIA. Extra large salmon-rose.

689 VALENCIA. Sunproof, orange, long-stemmed.

Price any of above: Pkt., 15c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

690 EARLY FLOWERING MIXED. A splendid mixture containing all colors. Pkt., 15c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

CUTHBERTSON SWEET PEAS. See Novelty page 23.

Summer Flowering Spencer

691 AVALANCHE. Frilled white flowers.

692 BEAUTY. Blush-pink.

693 COMMANDER GODSALL. Deep violet-blue.

Price any of above: Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c.

694 HEAVENLY BLUE. Delphinium-blue.

695 HUNTSMAN. A sun-proof scarlet.

696 IVORY PICTURE. Ivory-cream.

697 PINKIE. Clear deep pink.

698 PIRATE GOLD. Golden orange.

Eight Summer Flowering Sweet Peas

2699 Contains 1 packet each of the eight varieties offered above. **Value,** 80c; for 60c.

699 BEST SPENCER MIXED. Comprises the best varieties in all beautiful shades and colors and much superior to that offered indiscriminately as coming from growers. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 65c; 1 lb., \$2.00.

HARDY SWEET PEAS. See Lathyrus latifolius, page 46.

Tagetes - Pigmy Marigold

700 SIGNATA PUMILA, LITTLE GIANT. We are proud to offer Little Giant as the highest development yet attained of this pretty little Marigold, with slender fernlike foliage and an abundance of dainty, single, golden orange flowers on plants 4 to 6 inches high, with spread of 8 to 10 inches. Pkt., 10c.



Tithonia, Fireball

Tithonia

The Golden Flower of the Incas
or Mexican Sunflower

Tithonia is a rare plant coming from Mexico, the home of the dahlia. History tells us that Tithonias were found growing in Peru as early as 1531, and were later found in Mexico. It is remarkable that a flower of such striking beauty should have been lost to cultivation until this time.

701 FIREBALL. Dazzling as a ball of fire poised high above other flowers, Fireball is undoubtedly the last word in brilliance of color in a fall blooming plant. Many who have known and enjoyed Tithonia Speciosa have considered it the brightest possible flower for fall use. With the introduction, however, of Fireball, this older variety is entirely overshadowed. Fireball is a very brilliant, vibrant shade of scarlet-orange, the petals in dazzling contrast to the clear yellow center. The gaily colored flowers are single, very large, $4\frac{1}{2}$ to 5 inches in diameter, and are carried on fine long stems. The plants are very tall, some reaching a height of 8 or 9 feet, with a fairly heavy growth of grayish green, woolly foliage. They are, however, neat in appearance, filling in well from the very base of the plant to the top, and unlike the older Tithonia Spe-

ciosa do not become ragged looking. In southern warm districts, seed should be sown in late spring outdoors, while in the northern sections it should be started indoors and the plants set out after danger of frost has passed. Tithonia Fireball is a tender annual, flowering late in the season, and is not subject to plant diseases. It is extremely showy in the garden and an excellent new cut flower variety, as the flowers will keep five or six days when cut. **Pkt., 15c.**

Verbena

NEW GIANT HYBRIDS

A magnificent new strain of Verbena, of robust, compact habit and free blooming. The trusses are immense, the individual florets measuring an inch in diameter. These Verbenas are fixed and come true from seed.

Seed can be started in the house and transplanted to the garden when the weather is warm, or sown in the open ground, thinned and transplanted. Verbenas from seed are much more thrifty and less liable to rust than from cuttings. Annual. 1 foot high.

702 BEAUTY OF OXFORD. A beautiful giant strain. Colors shade from rose-pink to rose-red. **Pkt., 15c.**

703 LAVENDER GLORY. A true lavender with a medium sized creamy white eye. **Pkt., 15c.**

704 ROYALE. This is a Verbena of enormous size, the individual florets measuring over an inch and a quarter in diameter. The color of this new Verbena is a rich, deep, royal blue with a large creamy yellow eye. **Pkt., 15c.**

705 SALMON-PINK. Beautiful salmon-pink flowers. **Pkt., 15c.**

706 SPECTRUM RED. An intense bright red having no eye. This variety is a brighter shade than any other Verbena yet introduced. The individual florets are $1\frac{1}{4}$ inches in diameter. **Pkt., 15c.**

707 WHITE. **Pkt., 15c.**

708 MAMMOTH MIXED. Comprising a wonderful range of charming colors in every conceivable shade. **Pkt., 15c.**

COLLECTION

New Giant Flowering Verbenas

2708 Contains one packet each of Royale, Spectrum Red, Salmon-Pink, and White, (value 60c) for 45c.

Verbena Venosa - Hardy Garden Verbena

®709 DELICATE LILAC. Forms erect plants, 12 inches high, with delicate lavender flowers produced in such masses as to completely hide the foliage. It is perfectly hardy and does well in beds, borders and may also be used in the rock garden. A perennial treated as an annual, blooming the first year from seed; if sown early will then bloom until frost. **Pkt., 20c.**

McCullough's "Surprise Garden" Flower Seed

This comprises a mixture of annuals, biennials and perennials and consists of sorts growing at moderate heights. No vines, trailers, or very tall growing plants are used in it. **715 Large pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; 1 lb., \$2.50.**



Verbena

Vinca - Periwinkle

Valuable for bedding, seed should be sown early. Annual.

710 ROSE **712 WHITE.**

711 WHITE with crimson eye. **713 MIXED.**

Any of the above: **Pkt., 15c.**

VIOLA. See Perennials, page 48.

Wallflower

714 EARLY WONDER MIXED. A recent novelty from Europe. If planted in early spring will be in full bloom by early summer. The flowers are equal to the perennial in size and every respect. It was developed by crossing the Perennial Double with the Early Annual and should thrive and bloom profusely in our warm and dry summer. **Pkt., 15c.**

Xeranthemum - Everlasting Flower

716 DOUBLE MIXED. Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink, white and purple. **Pkt., 10c.**

McCullough's Zinnias for every Purpose

Few, if any, annuals have greater utility value than that of the Zinnia. Many distinct types have been developed, some bearing flowers of enormous size and others producing miniature double blooms in profusion. For early flowers sow seed indoors in March and transplant seedlings to the garden in early May, or, if preferred, sow seed in open ground in April. Space the large flowering and taller sorts from 1½ to 2 feet apart; Pompon or Lilliput types 8 to 12 inches apart.

Giant Dahlia-Flowered Zinnias

The most outstanding of all Zinnias because of the wonderful range of rich colors. The flowers are immense, often measuring 5 to 6 inches across, and 3 to 4 inches in depth. They are borne profusely from late summer until frost. The bushes are 2½ to 3 feet tall, of well-rounded form.

717 CANARY BIRD. A delicate shade of primrose; very large and holds its color well until out of bloom. Pkt., 15c.

718 CRIMSON MONARCH. By far the largest and best of the red shades. Flowers often eight inches in diameter. Plants very vigorous. A marvelous production of extraordinary merit. Pkt., 15c.

719 DREAM. A fine, deep lavender, turning to purple (Mallow Purple), a new, desirable shade in Zinnias. Pkt., 15c.

720 EXQUISITE. By far the most pleasing of our collection. Truly Dahlia-flowered as regards form and size. Color light rose with center a deep rose (Tyrian rose). Pkt., 15c.

721 GOLDEN DAWN. A beautiful golden yellow of immense size and good form. Very attractive. Pkt., 15c.

722 GOLDEN STATE. A very rich orange-yellow (cadmium). Yellow in the bud, turning to an attractive orange when in full bloom. Pkt., 15c.

723 ILLUMINATION. Similar to Exquisite, but a striking shade of deep rose. Pkt., 15c.

724 LUMINOSA. Bright deep pink. Pkt., 15c.

725 METEOR. A rich, glowing deep red (spinel red) and the darkest of all the red shades. Fine form, with good depth of petal. Very large and more floriferous than other reds. Pkt., 15c.

726 OLD ROSE. This is adequately described by its name, as it is of the real old-rose shade; it is large and for charm and beauty we consider it ranks next to Exquisite. Pkt., 15c.

727 ORIOLE. We consider this the most beautiful of its class. It is an immense orange and gold bicolor, changing slightly as it ages, but at all times worthy of the beautiful bird for which it is named. Pkt., 15c.



Dahlia-Flowered Zinnia

728 POLAR BEAR. A very large pure white; the best white yet seen in Zinnias. True Dahlia form. Pkt., 15c.

729 PURPLE PRINCE. A fine deep purple (Rhodanthe purple), large and well formed. Pkt., 15c.

730 ROYAL PURPLE. A deep rich reddish purple. Deeper and richer than Purple Prince. All-America Winner for 1942. Pkt., 15c.

731 SCARLET FLAME. A large, beautiful, bright scarlet, with a delightful blending of orange throughout the petal. This is not a bicolor. Pkt., 15c.

Any of the above Dahlia-Flowered Zinnias, ½ oz., 35c; ¼ oz., 60c; oz., \$1.75.

732 SPECIAL GOLD MEDAL MIXTURE. A well-blended mixture containing all the above novelties. Pkt., 15c; ¼ oz., 50c; oz., \$1.50.

SPECIAL COLLECTIONS Giant Dahlia-Flowered Zinnias

2732 Contains 1 packet of the above 15 separate named varieties. (Value \$2.25) for \$1.75.

3732 Contains 1 packet each of **Crimson Monarch, Dream, Illumination, Golden Dawn, Polar Bear.** (Value 75c) for 60c.

733 PASTEL MIXTURE DAHLIA-FLOWERED ZINNIAS. Composed solely of delicate colors. Comprises soft shades of lemon-yellow, shell-pink, delicate salmon, light rose and orchid. Pkt., 15c; ½ oz., 35c; ¼ oz., 60c.

California Giant Zinnias

The strain has the same robust habit as the Dahlia-Flowered. When the flowers are in full bloom, they reach enormous size, but their flatness gives them a most graceful appearance.

734 BRIGHTNESS. Bright, deep pink.

735 DAFFODIL. Canary-yellow.

736 GRENADIER. Bright dark red.

737 LAVENDER QUEEN. Deep lavender turning to purple.

738 LEMON QUEEN. Golden lemon.

739 MISS WILLMOTT. Soft pink.

740 ORANGE KING. Orange-scarlet.

741 PURITY. White.

742 SALMON QUEEN. Salmon-rose.

743 VIOLET QUEEN. Deep purple.

PRICE, any of the above: Pkt., 15c; ½ oz., 35c; ¼ oz., 60c; oz., \$1.75.

744 FINEST MIXED. A mixture of the above varieties. Pkt., 15c; ½ oz., 35c; ¼ oz., 50c; oz., \$1.50.



California Giant Zinnia



Lilliput Zinnias

Zinnia, Lilliput

This type of Zinnia forms a bush about 12 to 15 inches high and is covered with small, very double flowers in profusion. Excellent for cutting.

- 745 **BLACK RUBY.** Blackish maroon.
 746 **CANARY-YELLOW.**
 747 **DAINTY GEM PINK.**
 749 **GOLDEN GEM.**
 750 **LILAC GEM.**
 751 **PURPLE GEM.**
 752 **ROSEBUD.**
 753 **SALMON-ROSE.**
 754 **SCARLET GEM. (Red Riding Hood).**
 755 **VALENCIA.** Burnt orange.
 756 **WHITE GEM.**

PRICE, any of the above Lilliput Zinnias: Pkt., 10c; $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; oz., \$1.20.

757 **FINEST MIXED.** A mixture of the above colors. $\frac{1}{4}$ oz., 35c; oz., \$1.00; pkt., 10c.

758 **PASTEL MIXTURE.** Composed solely of delicate colors not found in the ordinary Lilliput Mixture. It comprises soft shades of apricot, peach, creamy yellow, shell-pink, delicate salmon, light rose and orchid. Pkt., 15c; $\frac{1}{8}$ oz., 25c.

Our Special Offer of Lilliput Zinnias

2757 Contains a packet each of Canary-yellow, Scarlet Gem, White Gem, Salmon-Rose and Purple. (Value 50c) for 40c.

Scabiosa-Flowered Zinnia

An entirely distinct and attractive strain of Zinnia of exquisite form, reminding one of the double crested Cosmos and quite often resembling the Annual Scabiosa. The flowers are of medium size and each bears a collar of petals surmounted by a full double crest of the same tone of color. Height about 2½ feet.

759 **MIXED.** Color range from pale rose to crimson-scarlet with orange, golden and purple shades. Pkt., 15c.

Fantasy Type,
WildfireTom Thumb
Zinnia

McCullough's

SMALL FLOWERED ZINNIAS Cactus-Flowered Giants

Petals are quilled, curled and pointed; flowers 4 to 4½ in. across, 2 in. deep.
 760 **MIXED COLORS.** Pkt., 15c.

Zinnia, Crown o' Gold

761 **MIXED.** This new Zinnia derives its name and distinction from the fact that each petal of the flower is overlaid with a deep golden yellow at the base, while carrying out the individual flower color at the tip. The effect is a very pleasing two-tone color harmony. The color range comprises the more popular shades, including old rose, cream, yellow, carmine, and burnished red; the latter a new shade in Zinnias. Pkt., 15c.

LUTHER BURBANK ZINNIAS. See Novelty page.

Fantasy Zinnias

New Zinnias are always welcomed by home gardeners and florists alike. While the Giant-Flowered varieties are still popular, the trend of late years has been toward the smaller flowered, more graceful types. This new Fantasy Zinnia meets this demand in all details. The rounded flowers are composed of a mass of shaggy raylike petals which give a delicate and refined appearance to the medium sized double flowers, large enough to satisfy the desire for massive color, yet small enough to lend themselves gracefully to flower arrangements. Plants 2½ to 3 feet in height, will bloom in 45 to 50 days after seed is planted.

763 **STARDUST.** Golden yellow.

764 **WHITE LIGHT.** Pure white.

765 **WILDFIRE.** Dazzling scarlet.

766 **FANTASY MIXED.** Includes the brightest shades of red and orange as well as the pastel pink and cream.

Price, any of the above: Pkt., 15c; $\frac{1}{8}$ oz., 35c; $\frac{1}{4}$ oz., 60c.

767 **SUPER FANTASY DAVID BURPEE MIXED.** Strikingly different. Very large with petals attractively curled and quilled. Pastel colors predominate. Plants about 3 feet tall. Pkt., 20c.

Various Zinnias

769 **MEXICANA HYBRIDS.** Single and semi-double flowers somewhat like those of the French Marigold, in shades of yellow, orange, crimson, and brown. Height 18 inches. Pkt., 10c; $\frac{1}{8}$ oz., 35c.



Gaillardia-Flowered Zinnias

Gaillardia-Flowered Zinnia

770 **NAVAJO.** Medium large flowers about 2 inches in diameter, in attractive two-tone combination of rose, bronze, yellow and orange. The colorings in this Zinnia are similar to those found in a Navajo rug, hence its name. Fairly long, stems, plant about two feet tall, fine for cutting. Pkt., 10c; $\frac{1}{8}$ oz., 25c.

Zinnia Linearis

771 **Linearis** is a dwarf early flowering form somewhat comparable to Mexican Zinnia. The single flowers are deep golden orange in color, with a delicate light yellow stripe which contrasts boldly with the dark center—a combination which is most attractive. It is early flowering, and the plant reaches a height of 8 to 10 inches with a spread of as much as 2 feet. Pkt., 15c.

Tom Thumb Zinnias

772 **Tom Thumb** is without exception the dwarfest Zinnia known. The plants are rounded and compact, 4 to 6 inches high, literally covered with well formed flowers of the Lilliput type. The color range includes red, orange, yellow, pink, rose, and other pastel shades. During the hot, dry summer months this is the ideal border plant and it is also well adapted for window box and pot work. Pkt., 15c.

Giant Crested Howard Zinnia

A cross between the smaller flowered Scabiosa type and the giant Dahlia-Flowered. Flowers 4 to 5 in. across, resembles a large double Pyrethrum.

773 **MIXED COLORS.** Pkt., 15c.

McCullough's Special Large Flowering Zinnia Mixture

775 Consists of all giant sorts, including the best of the Dahlia-Flowered California Giants, Crown o' Gold, Curled and Crested. This mixture will produce a riot of color in your garden as well as cut flowers for the table. Pkt., 15c; $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; oz., \$1.25.

FEED THE WILD BIRDS

See page 59



F. V. Geier Estate, Indian Hill, Cincinnati, Ohio

Seeds of Hardy Perennial Flowers and Rock Garden Plants

There can be no greater joy than the planting of your own Perennial or Rock Garden, and certainly nothing more fascinating than actually growing from seed the plants and varieties desired. Perennials are those plants that go on living and increasing for a number of years, the stems dying down each season and coming again from the roots each spring. Most varieties are easily raised from seed sown during the late spring and early summer in frames or seed beds and transplanted to their permanent quarters in late summer or early autumn. If the seed be planted in August, they should be wintered over in the cold frame and transplanted to the border or rockery the following spring.

We recommend sowing perennial seeds in the spring. Seed germinates better, seedlings have an opportunity to develop into sturdy plants by fall, which permits them to winter over more successfully. The majority of these perennials bloom the second year from seed, although some, like *Coreopsis* and *Gaillardia*, grown early, bloom the first year. Perennials should be placed in clumps of three or five and left undisturbed for several years.

All varieties marked with an ® throughout the list are especially suitable for the rockery.

Achillea - Milfoil or Yarrow

776 PTARMICA, THE PEARL. A free blooming hardy perennial, bearing a profusion of small, double, white flowers on plants 2 feet tall, during July and August. Easily grown from seed, flowering the first season, if sown early. **Pkt., 15c.**

Agrostemma - Mullein Pink

777 CORONARIA. Silvery foliage and bright crimson flowers, free flowering hardy perennial of easy culture; blooms the first season; fine for cutting; 2½ to 3 feet. June to August. **Pkt., 15c.**

Alyssum - Rock Madwort

® **778 SAXATILE COMPACTUM** (Basket of Gold). Showy, bright yellow flowers, hardy perennials; excellent for rock work; 1 foot. **Pkt., 10c; ¼ oz., 60c.**

® **779 SAXATILE COMPACTUM, SILVER QUEEN.** Broad masses of pale lemon flowers in early spring. Useful in the border as well as in the dry wall or rock garden. **Pkt., 20c.**

ANNUAL SWEET ALYSSUM. See page 25.

VINES. See page 49.

Anchusa

780 ITALICA, LISSADEL. Upright habit, having flowers of the brightest blue. **Pkt., 25c.**

Anthemis - Hardy Marguerite

781 KELWAYI. A most satisfactory hardy perennial, bearing all summer daisy-like, golden yellow blossoms; excellent for cutting. 2 feet. **Pkt., 10c.**

Arabis - Rock Cress

® **789 ALPINA.** A hardy perennial and one of the earliest and prettiest spring flowers. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequalled for rockeries or edging; withstands the drought and is always neat; 6 inches. **Pkt., 15c.**

Armeria - Sea Pink or Thrift

Attractive dwarf plants that are invaluable for the rock garden, thriving in sunny places and succeeding in any soil. Forms evergreen tufts of bright green foliage from which flowers appear in dense heads on stiff, wiry stems, from 3 to 12 inches high. May be easily raised from seed.

790 GIANT HYBRIDS. A mixture of bright pink, red and carmine. **Pkt., 20c.**

Aquilegia - Columbine

McCullough's Giant Long-Spurred Columbines

The following group comprises without doubt the finest long-spurred Columbines to date. Huge flowers on plants 3-4 feet high; strong, robust and very free flowering.

782 BLUE SHADES. Pkt., 25c.

783 PINK SHADES. Pkt., 25c.

784 LONG SPURRED MIXED. All shades, including many not found in other strains. **Pkt., 25c.**

This graceful Hardy Perennial is an ideal plant for partially shaded borders. As a cut flower it is noted for its beauty of form and richness of color.

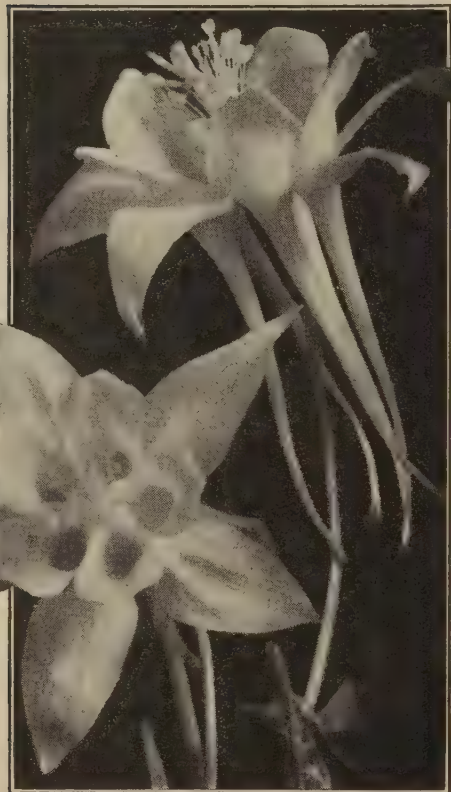
CULTURE. Columbines, especially the long-spurred hybrids, thrive in a light soil, loose and fibrous, provided by adding peat and well-decayed manure. When planted in partial shade, the flowers develop better, grow larger and last longer. Easily raised from seed.

785 LONGISSIMA. The flowers are of striking formation, with deep yellow petals and paler yellow sepals, and extremely elongated spurs. The plants are from 2 to 3 feet tall, with characteristic bright green cut-leaf foliage, and reddish stems. Flowers are produced during spring and early summer and are effective in the garden, although much more so in flower arrangements. **Pkt., 35c.**

786 CRIMSON STAR. Long-spurred crimson and white. About 2 feet high. **Pkt., 25c.**

787 DOBBIE'S IMPERIAL HYBRIDS. These new long-spurred Columbines are unequalled for their range of colors and sturdiness. They have received a great deal of attention abroad and are considered in England to be one of the best mixtures offered today. **Pkt., 25c.**

788 MRS. SCOTT ELLIOTT'S STRAIN OF LONG-SPURRED HYBRIDS. A renowned English strain, which enjoys a world's reputation for large size flowers with long spurs. The colors range from pure white through tones of pink, blue, yellow and red. **Pkt., 20c.**



Columbine, Dobbie's Imperial Hybrids

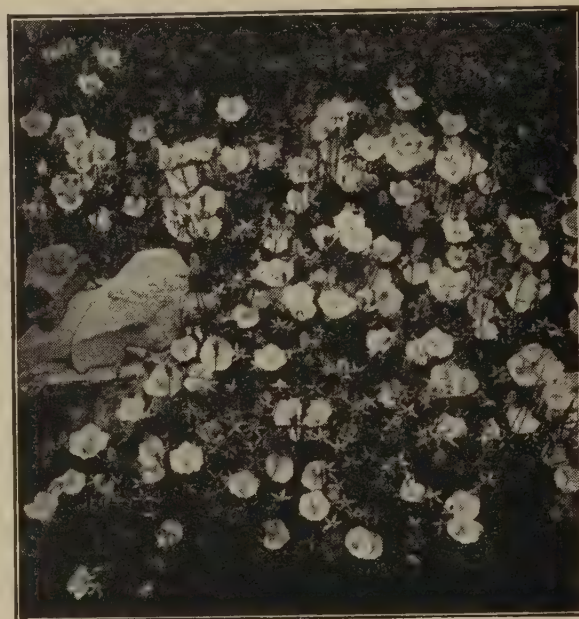
Aubrietia - False Wall Cress

Lovely dwarf growing perennial plant that should be enjoyed in more gardens. Their use is not confined to the rock garden but when massed on dry walls or along the edge of sunny borders with white Arabis and yellow Alyssum will give rich spreads of color. Moreover, they are easily raised from seed, blooming the second year. The plants should be well clipped over after flowering so that they will make a fine growth for the next year's blossoming.

792 LARGE FLOWERING HYBRIDS. Exceptionally fine strain, including a wide range of many unusual colors, which cannot be fixed and offered separately. **Pkt., 15c.**

Hardy Perennial Asters

791 MIXED (Michaelmas Daisies). Single fall flowering hardy herbaceous plants, thriving in any good garden soil. If sown early they will flower the first season. 3 feet. **Pkt., 15c.**



Campanula Carpatica, Blue

Bellis Perennis - English Daisy

A well-known dwarf-growing plant which bears massive and very double aster-like flowers. It is very useful for borders or growing for cut flowers. Plants are about 6 inches high and bear in greatest profusion.

793 DOUBLE MIXED. Large, double flowers, various shades, pink, red, white and other colors. **Pkt., 25c.**

Campanula

In this great family of plants are some of the loveliest and most enchanting of rock plants and alpine, as well as a great number of beautiful and useful plants for the open borders and for naturalizing in half-shaded wild gardens. Easily raised from seed and having the advantage of flowering late and giving blooms in the summer time when flowers in the rock garden or perennial border are scarce.

Campanula - Bellflower

The following Campanulas are all hardy perennials and will succeed in ordinary rich soil.

®794 CARPATICA, BLUE (Carpathian Harebell). Free-flowering hardy perennial plants, continuing in bloom the whole season; color clear blue. Good for edging and rock gardens. Will bloom the first season if sown early. Height, 6 inches. **Pkt., 20c.**

®795 CARPATICA ALBA. The white-flowered form of the above. **Pkt., 20c.**

Campanula Medium

SINGLE CANTERBURY BELLS

These single Canterbury Bells are highly valued by many gardeners as they will give an exceedingly fine display in the garden and will last quite some time as cut flowers. Cover during the winter with evergreen boughs to protect against severe freezing.

796 DARK BLUE. Pkt., 10c.

797 LIGHT BLUE. Pkt., 10c.

798 PINK. Pkt., 10c.

799 WHITE. Pkt., 10c.

800 SINGLE MIXED COLORS. Pkt., 10c.

Campanula Calycanthema

Cup-and-Saucer Canterbury Bells

801 SPECIAL MIXTURE. Pkt., 10c; ½ oz., 50c.



Campanula Medium

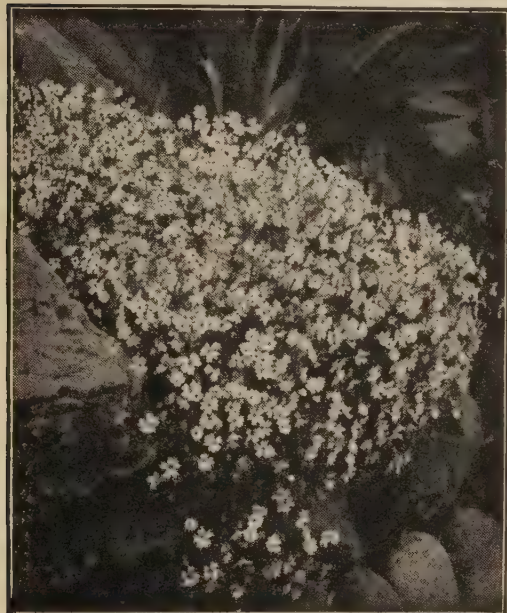
The varieties marked ® are especially suitable for the rock garden.

Hardy Border Carnations

802 GRENADIN MIXED. Dwarf, compact plants with a great profusion of double flowers in various colors. Early flowering and invaluable for cutting. Will bloom first year if seed is sown early. 1 ft. **Pkt., 25c.**

Centaurea

803 MONTANA (Perennial Cornflower). Hardy perennial variety, grows 2 feet high, bearing large violet-blue flowers from July to September. **Pkt., 15c.**



Cerastium Tomentosum

Cerastium-Snow-in-Summer

These blanketing hardy perennial plants are suitable for growing over stones and rough banks, also used on rough places in the rock garden or for edging of borders.

804 TOMENTOSUM. Narrow, silvery foliage with white flowers, suitable for planting in dry sunny places. 3 to 6 inches. June. **Pkt., 10c; 1/8 oz., 35c; 1/4 oz., 55c.**

Cheiranthus

Very pretty dwarf hardy biennial plants, usually handled as annuals, flowering freely throughout the summer from seed sown in spring; for early spring flowering, sow in late summer. Splendid for rockery.

805 GOLDEN BEDDER (Siberian Wall-flower). About 12 inches high with heads of brilliant orange flowers. **Pkt., 10c; 1/4 oz., 25c.**

Coreopsis - Tickseed

Will flower the first year if sown very early.

809 MAYFIELD GIANTS. Deep golden yellow. This variety will produce a tall and vigorous plant, having long and firm stems and large individual blossoms. Excellent for cutting. Blooms freely all summer. **Pkt., 15c; 1/8 oz., 25c.**

810 SUNBURST. This new double form is just as easy to grow as the single varieties offered above and the extra petalage adds a further charm to the flowers. **Pkt., 15c.**

Chrysanthemum - Shasta Daisy

806 NEW GIANT DOUBLE WHITE. (Diener Strain). This strain includes an assortment of various types of double flowers ranging from the most fully double fringed petaled sorts through semi-doubles to a type which, though single, forms unusual and beautifully shaped flowers with lacinated, curled and quilled petals. The flowers are all large and carried on long wiry stems. **Pkt., 40c.**

807 CONQUEROR. A Shasta Daisy producing very large pure white flowers, 5 inches in diameter, borne on long, stiff stalks, 18 inches and more in length, of which the vigorous plant throws up a large number. Blooming takes place in about midseason and it is no doubt the largest variety for cutting yet produced. **Pkt., 15c; 1/8 oz., 35c.**

808 ALASKA. A splendid hardy perennial variety with flowers rarely less than 5 inches across, of the purest glistening white, with broad overlapping petals, and borne on long strong stems; a beautiful cut flower, remaining in good condition a week or more. **Pkt., 10c; 1/8 oz., 50c.**



Dianthus, Cheddar Pink

Dianthus - Hardy Garden Pinks

Every garden should include some of the pinks because they are so easily grown and make such a wonderful display with their bright colored flowers. The plants are covered with sweet-scented flowers all during the summer. Grows about 1 foot high.

822 ALLWOODI. Mixed. A splendid strain, being half carnation and half pink. 75 per cent come double. **Pkt., 35c.**

BARBATUS. See Sweet William, page 48.

823 HIGHLAND HYBRIDS. Tall strong-stemmed Pinks in a mixture of colors, beautifully marked and zoned; of the same habits as Highland Queen. **Pkt., 20c.**

824 PLUMARIUS (Pheasant's Eye Pink). A semi-double hardy variety, clove-scented. Flowers bluish-white, shaded with crimson and maroon. **Pkt., 15c; 1/8 oz., 65c.**

Dianthus Species

These well-known mountain plants are for the sunny border or sunny, exposed places in the rock garden or rock wall. They flower generally after the spring flowers are over and some are very fragrant. While having all the outward characteristics of high alpine plants, the varieties we list are as friendly and easily grown as Arabis or Alyssum. Hardy perennials.

CULTURE. Easily raised from seed, germinating quickly. Plant in ordinary good soil, which contains some lime and which should be well drained.

825 CAESIUS (Cheddar Pink). Pleasing to the eye at all seasons with its tufts of grey, narrow leaves and rose-pink fringed, spice-scented blossoms. Good for a south wall, or any dry, hot place on the rock garden. Will vary from 5 to 10 inches high. Late May to early July. **Pkt., 10c; 1/8 oz., 35c; 1/4 oz., 50c.**

826 DELIGHT. Will grow about nine inches high, of neat erect habit, will bloom from June to October. Flowers 1/2 inch wide in shades from the palest pink down to the deepest purple and reds. **Pkt., 25c.**

827 SUPERBUS, LOVELINESS. The plants are 12 to 15 inches tall, of good branching habit and very free-flowering. The shaggy appearing, finely fringed flowers of delicate rosy lilac are highly sweet-scented and measure from 1 1/2 to 2 inches across. **Pkt., 25c.**

ANNUAL PINKS. See page 30.

**YOU TOO . . . CAN HAVE A
BEAUTIFUL LAWN!**

(See Inside Front Cover)



Shasta Daisy, Alaska

Delphinium - Hardy Perennial Larkspur

The Delphinium, or Hardy Larkspur, is one of the most valuable of all herbaceous plants. It provides many of the light and dark shades of blue colors greatly in demand, but very scarce. Many delightful shades of lavender and mauve are also present in the newest strains, all of which will be found in the choice varieties offered below.

CULTURAL DIRECTIONS. Delphiniums thrive in rich, deeply cultivated soil; however, any soil, even hot and sandy, if well watered and fertilized, will give excellent results.

If the flowering spikes are cut after blooming to within 8 to 10 inches from the soil, fertilized and watered, fresh growth will then be produced, which will give blossoms. Coal ashes strewn over the crown will protect the plants from slugs through the winter and spring, also forming a natural drainage of excess moisture from the crowns.

Pacific Strain Delphiniums

We offer below seed direct from originator of their new Pacific Strains of Delphinium in four distinct shades. Each color has been developed separately to come true from seed with slight variations within the color. The originator reports 90% true from seed.

811 BLUEJAY SERIES. The bluest of the present blues, ranging from medium to dark with strongly contrasting dark bee. Very long spikes, quite mildew-resistant. Pkt., 50c.

812 GALAHAD SERIES. Clear white of enormous size. Pkt., 50c.

813 KING ARTHUR SERIES. Brilliant royal violet with large white bee. Individual florets $3\frac{1}{2}$ inches in diameter, very thin woody stems with small foliage. Very long graceful spikes. Excellent for both cut flower and show purposes. Pkt., 50c.

814 GUINEVERE SERIES. Light pink-lavender self with white bee. Individual florets $2\frac{1}{2}$ to 3 inches in diameter, large spikes, excellent branching habits. For cut flower and show purposes. Pkt., 50c.

815 SUMMER SKIES SERIES. Clearest light blue with white bee. Individual florets 2 to $2\frac{1}{2}$ inches in diameter. Thin woody stems with very strong branching habits. Ideal for cut flower purposes. Pkt., 50c.

816 GIANT PACIFIC HYBRIDS (V. & R.) A new strain of hand pollinated Delphinium seeds from California. Mildew resistant, having large, fine spikes with large flowers that remain in good condition over a long period. Shades of lavender, violet and blue. We believe this strain to be an improvement in the Hybrid Delphinium class. Pkt., 40c; $1/16$ oz., \$1.35.

Delphinium Mixtures of Famous English Specialists

817 BLACKMORE & LANGDON'S STRAIN. We take great pride in offering this unusually fine mixture, which contains nearly all of the newest varieties developed by these famous English Delphinium specialists. Many of their varieties have earned gold medal awards in England. The seed we offer is saved from their best varieties, including their novelties and imported direct from them by us. Mildew resistant. Pkt., 40c.

818 WREXHAM HYBRIDS, HOLLYHOCK STRAIN. A fine mixture of all shades of blue, lavender and mauve. Large flowers well placed on long pyramidal spikes. Their sturdy appearance reminds one of the Hollyhock, hence the name. Pkt., 35c; $1/16$ oz., 90c; $1/8$ oz., \$1.60.



Delphinium, Blackmore & Langdon's Strain

Loose Spray Delphiniums

(Excellent for Cutting)

819 BELLADONNA (Cliveden Beauty). This is the freest and most continuous blooming Hardy Larkspur. The clear turquoise-blue of its flowers is not equalled for delicacy and beauty. Pkt., 15c; $1/8$ oz., \$1.00.

820 BELLAMOSUM. This is a rich, deep blue form of the popular light blue Belladonna, having the same free-blooming and other good qualities. Pkt., 15c.

821 CAMBRIDGE BLUE. It is a rich clear blue, growing about 2 to 3 feet high. Excellent for cutting. Pkt., 15c.

DELPHINIUM, ANNUAL. See Larkspur, page 31.

Digitalis - Foxglove

828 SHIRLEY STRAIN. The plants attain a height of 5 to 7 feet, with spikes 3 to 4 feet long carrying flowers of giant size, ranging in color from white to dark rose and handsomely blotched and spotted cream, maroon and chocolate. Pkt., 15c.

The Complete Book of Garden Magic

By Roy E. Biles

The Complete Book of Garden Magic offers 298 pages of garden information, with many practical illustrations in detail.

Price: \$3.50, Postpaid.



Shirley Strain Digitalis



Gaillardia, Portola Hybrids

Gaillardia - Blanket Flower

The Gaillardias are wonderful for cut flowers, blooming right through until frost, and adapt themselves to almost any kind of soil.

829 PORTOLA HYBRIDS. A superb new variety bearing flowers of immense size on long stems. The colors range through shades of bronze-red with golden tips; very robust. Hardy perennial. **Pkt., 15c.**

830 BURGUNDY. A brilliant coppery scarlet, sometimes yellow tipped. **Pkt., 20c.**

®831 GOBLIN. This is the first dwarf, compact variety of Gaillardia especially suited for the rockery. The neat plants reach a height of 12-15 inches and are covered with large showy yellow bordered red flowers. **Pkt., 15c.**

Geum - Avens

Geums have become indispensable border plants. The sorts named below bloom from early summer till late autumn, and the flowers, both for their purity of color and graceful poise, are much prized for cutting. Hardy perennial.

®833 DOUBLE, MRS. BRADSHAW. The orange-scarlet flowers are very large and full, comes quite true from seed, and blooms the first year. This is a great advance over any other Geum seedling. Height, 18 inches. **Pkt., 10c.**

®834 DOUBLE LADY STRATHEDEN. Fine, rich golden-yellow flowers, which match in other respects the popular scarlet variety, Mrs. Bradshaw, and will become as general a favorite. Height, 18 inches. **Pkt., 15c.**

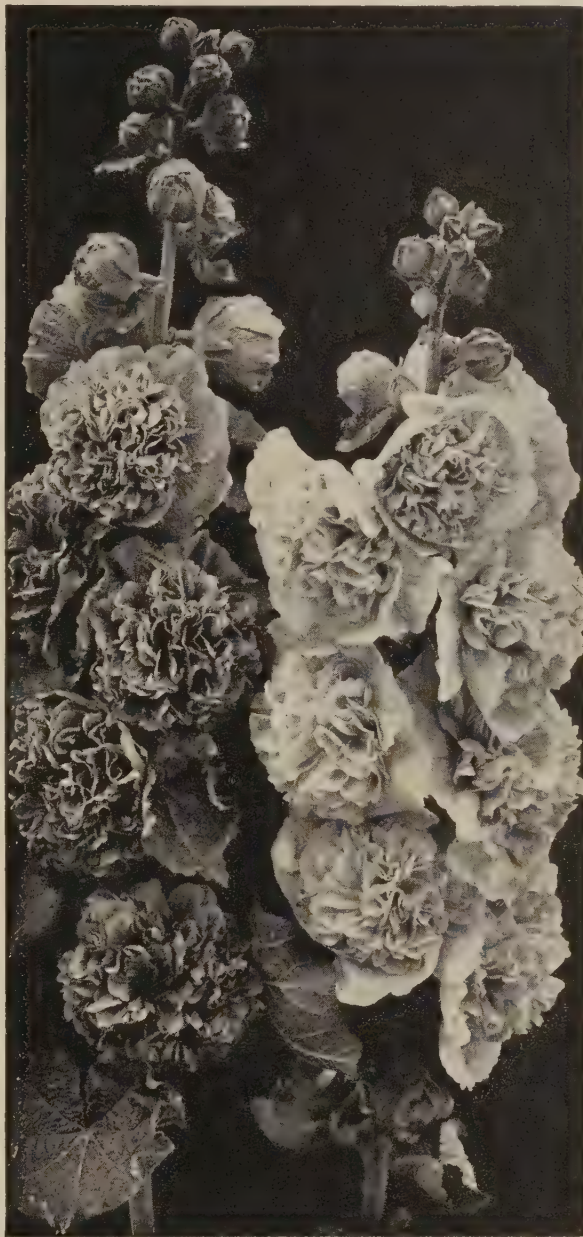
835 ORANGE QUEEN. This very fine new variety of a shade intermediate between that of Mrs. Bradshaw and Lady Stratheden, a bright orange-scarlet, has been in large demand during the past season. **Pkt., 15c.**

Gypsophila - Baby's Breath

Pretty free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.

836 PANICULATA. Single. White flowers, fine for bouquets; blooms first year if sown early. Hardy perennial. **Pkt., 10c; ¼ oz., 30c; oz., 90c.**

837 PANICULATA, Double. Pure white, giving a very large percentage of double flowers. Hardy perennial. **Pkt., 20c.**



Double Hollyhocks

2979 COLLECTION

Twelve Easily Grown Hardy Perennials

AGROSTEMMA. Mullein Pink.
COLUMBINE. Long spurred.
COREOPSIS. Mayfield Giant.
DELPHINIUM. Hybrid.
DIANTHUS. Pheasant's Eye Pink.
FOXGLOVE. Shirley Strain.
CANTERBURY BELLS. Cup-and-Saucer.
GAILLARDIA.
PLATYCODON. Bellflower.
POPPY. Orientale.
SHASTA DAISY. Conqueror.
SWEET WILLIAM.

One pkt. each of these 12 varieties,
 Value \$1.90, for \$1.50.

Hibiscus

(Rose Mallow or Marsh Mallow)

839 GIANT FLOWERING. Mixed. Showy, ornamental shrub, growing to a large size and blooming the first year from spring sown seed. Hardy as an oak and will thrive in any soil. The flowers often measure 8 to 10 inches across, are gorgeous in color and bloom in great profusion from late July to frost. Mixed colors. **Pkt., 15c.**

Hollyhock

840 DOUBLE WHITE. An improved strain producing perfect double flowers. **Pkt., 15c; ¼ oz., 65c.**

841 NEWPORT PINK. Pure pink; flower very double. **Pkt., 15c; ¼ oz., 65c.**

842 DOUBLE SCARLET. Very brilliant. **Pkt., 15c; ¼ oz., 65c.**

843 DOUBLE YELLOW. A bright lemon color. **Pkt., 15c; ¼ oz., 65c.**

844 DOUBLE MIXED. Comprises all shades. **Pkt., 15c; ¼ oz., 55c.**

845 SINGLE HOLLYHOCKS. Mixed. **Pkt., 10c; ¼ oz., 35c.**

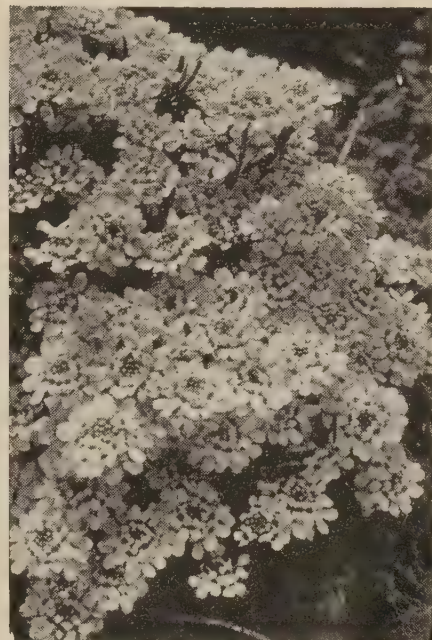
Iberis - Hardy Candytuft

Low evergreen, shrubby perennial plants which are very valuable for dry sunny places, that are well-drained. The plants should be clipped over after flowering, in order to keep them compact and slightly. Easily raised from seed.

®847 JUCUNDA. Pink. Very dwarf. **Pkt., 35c.**

®848 SEMPERVIRENS. A splendid shrubby plant bearing dense clusters of china-white blossoms, which cover almost entirely the dark, shining evergreen foliage. It is a good border plant, fine for dry walls, and the rock garden. Will grow either in a sunny or half-shaded position, 10 to 12 inches. May and early June. **Pkt., 20c.**

®849 GIBALTARICA. A very showy and large flowering variety with lilac-pink blossoms. A less hardy sort, needing protection in winter. It must be given the hottest and driest position. Prefers a light soil. 10 to 12 inches. May and June. **Pkt., 15c; ¼ oz., 40c.**



Iberis, Jucunda

A. S. T. A. GARDEN SEED
 ASSORTMENT FOR EUROPE

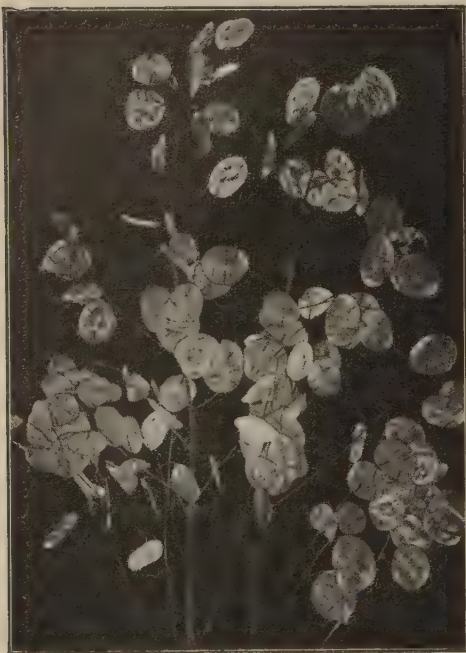
See page 17

Linum - Flax

Showy, free-flowering plants with feathery foliage, suitable for dry, sunny borders or rock gardens. Will not thrive in heavy, damp soils.

⑧54 **FLAVUM**. Gay yellow flowers in loose clusters. Foliage dark green, forming a dwarf group in the perennial border. Thrives in a sunny situation in light, rich soil. Hardy perennial. Pkt., 15c; ½ oz., 70c.

⑧55 **PERENNE**. Bright blue flowers. Hardy perennial. 18 inches. Pkt., 15c.



Honesty—Lunaria

Honesty - Lunaria

846 **BIENNIS ALBA**. (Saint Peter's Penny). Hardy perennial admired for its silvery seed pods, used for winter bouquets. Beautiful cross-shaped flower. Sow in open ground in May. Protect over winter. Pkt., 10c.

Lathyrus Latifolius
(HARDY SWEET PEA)

Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting.

850 **MIXED**. All colors. Pkt., 10c; ¼ oz., 60c.

Lavender - Lavandula Vera

851 Well known, sweet-scented hardy perennials; should be extensively grown in the mixed border. 3 ft. Pkt., 25c.

Lilium

Lilies do exceedingly well in the hardy perennial border. We recommend that they be planted among the hardy perennials, as the shade from the surrounding plants is necessary for their welfare. Lilies are very showy and hardy, and should be planted freely in the garden.

852 **REGALE** (Regal Lily). It is absolutely hardy and is excellent for forcing. The flowers are white, slightly suffused with pink, with a beautiful shade of canary-yellow at the center, and extending part way up the trumpet. It is delightfully perfumed, reminding one of the Jasmine, and lacking the heavy, oppressive odor of most Lilies. Blooms out-of-doors early in July, and seedling bulbs will flower the second year. Lift the bulbets in fall and replant to greater depth in their permanent location. Pkt., 15c; ½ oz., 55c.

853 **TENUIFOLIUM** (Coral Lily of Siberia). It is a gem. Perfectly hardy. One of the earliest to flower. 24 inches high with the flowers up and down on the stem. Blooms are deep scarlet and have recurved petals of waxy texture. Pkt., 15c.



Regal Lily

Russell Lupins

This new strain of perennial Lupins, as is now widely known, caused a sensation in horticultural circles. Raised by Mr. G. Russell of York, England, and are the results of twenty years work of a little known gardener whose name is likely to become a by-word among flower lovers. Awarded the Royal Horticultural Society's Gold Medal, June, 1937. The long, closely furnished spikes flower in a great variety of rich colors, deep yellows, oranges, reds and brilliant bicolors never seen in Lupins before. The flowers are large with flat, fan-like back-standards, and, unlike all other Lupins, most of the spikes retain their flowers throughout the whole period of development. Original stock.

856 **"RUSSELL"**. Grown from originator's stock seed. A fine collection. 50 seeds, 25c.

For more beautiful and luxuriant Sweet Peas and Lupinus, inoculate with Nitragin. See page 50.

Oenothera -
(EVENING PRIMROSE)

The Evening Primrose is noted for its heavy scent, given off during the evening hours. Its yellow flowers, attractive during the daytime, seem to reflect the moon at night.

859 **MISSOURIENSIS**. Yellow. Pkt., 15c.

Myosotis - Forget-Me-Not

⑧57 **PALUSTRIS SEMPERFLORENS**. An everblooming variety, beginning to flower in May and continuing till autumn. Large, clear blue flowers in pretty sprays. Perennial. Pkt., 15c.

Nierembergia

(BLUE CUP FLOWER)

⑧53 **PURPLE ROBE**. Deep blue or violet-blue in color. This variety is a half-hardy perennial treated as an annual, blooming in about 15 weeks from sowing. It prefers full sun, sandy loam, and makes a grand border and edging subject. It will remain in bloom over a long period, and with a colorful blanket of blue. Very dwarf, about 6 inches tall, cushion-like plant, surmounted with flowers the color of silvery blue Petunias. Awarded Bronze Medal, All-America Winners for 1942. Pkt., 20c.

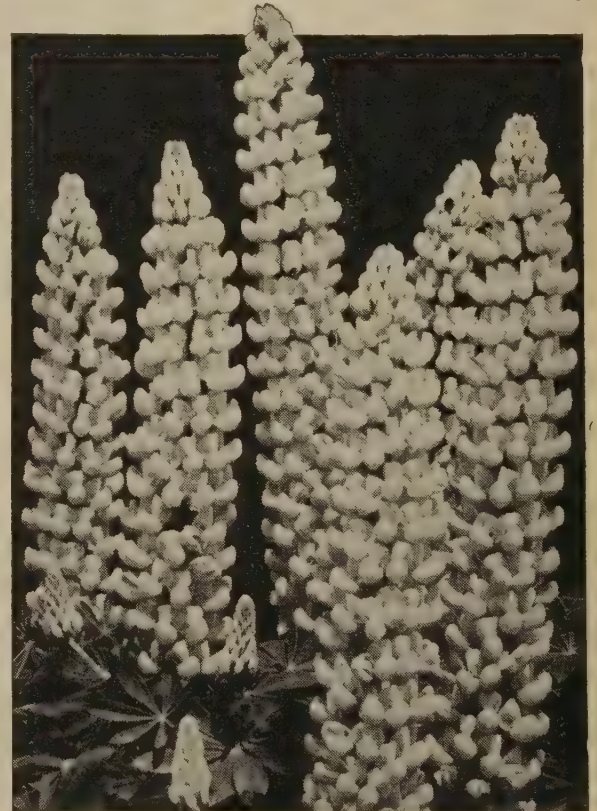
PANSIES, TUFTED. See Viola, page 48.

Platycodon -**Balloon Flower or Bellflower**

One of the best hardy perennials, producing very showy flowers during the whole season. They form large clumps and are excellent for planting in permanent borders or among shrubbery; easily raised from seed, which begins blooming in August if sown outdoors in April.

863 **GRANDIFLORUM BLUE**. Large, deep blue flowers. Pkt., 15c.

⑧64 **MARIESI**. A beautiful dwarf species, with broad, thick foliage and large, deep violet-blue flowers on 12-inch stems in great profusion throughout the entire summer. Plant in front of the border or in the rock garden. Pkt., 15c.



Russell Lupins



Pyrethrum—Painted Daisies

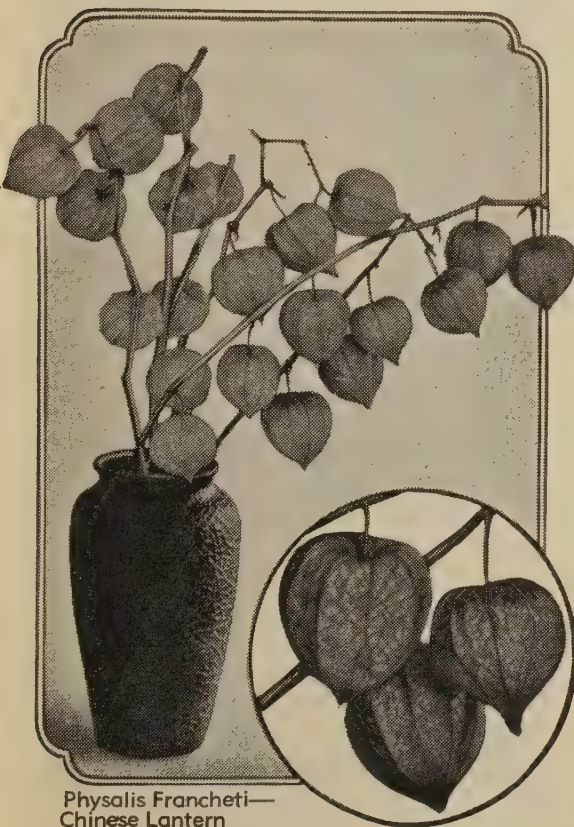
Pentstemon - Beard Tongue

860 GLOXINOIDES, "SENSATION." Gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, pink, lilac, purple, etc. **Pkt., 15c.**

PETUNIA. See pages 34 and 35.

Physalis - Chinese Lantern Plant

862 FRANCHETI. An ornamental plant forming dense bushes about two feet high, producing freely its bright orange-scarlet lantern-like fruits, which can be cut and dried for winter bouquets; highly interesting. Perennial. **Pkt., 15c.**



Physalis Francheti—Chinese Lantern

Phlox, Perennial

861 DECUSSATA MIXED. Contains all the new brilliant colors; large flowering. **Pkt., 15c.**

Perennial Poppies

Oriental Poppies (Papaver Orientale)

These are highly decorative. Their huge, brightly colored flowers are borne profusely during May and June. Sow where to bloom. Height 3 feet.

865 BEAUTY OF LIVERMERE. Large flowers, crimson with black blotch. **Pkt., 25c.**

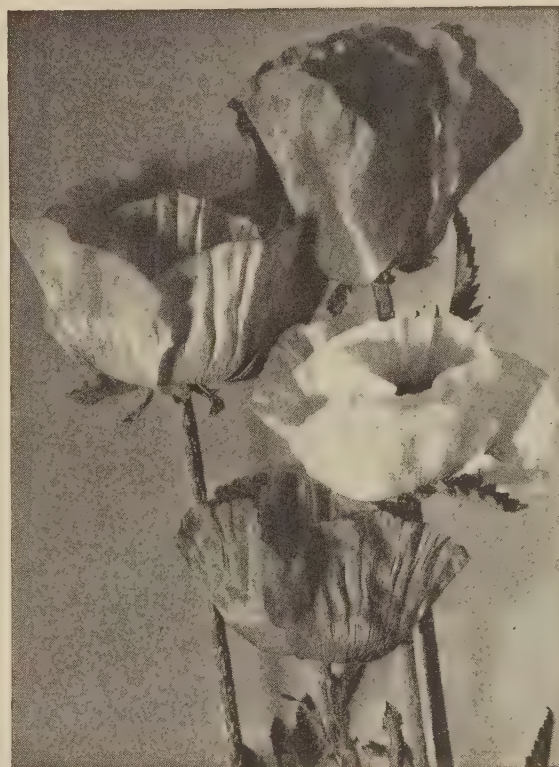
866 MRS. PERRY. Orange-apricot; very fine. **Pkt., 25c.**

867 PRINCESS VICTORIA LOUISE. Delicate salmon-pink. **Pkt., 15c.**

868 FELTHAM. Distinct type, various colors but no black blotch at base. **Pkt., 25c.**

869 ORIENTALE, SCARLET. Very hardy, producing showy scarlet flowers. **Pkt., 15c.**

870 ORIENTALE HYBRIDS. Mixed colors. **Pkt., 15c.**



Oriental Poppies

Iceland Poppies - Papaver Nudicaule

Graceful light green tufts of foliage; large, gaily colored flowers on stems 1 foot tall. Bloom for many months.

871 KELMSCOTT STRAIN. Flowers are larger than any other variety of Iceland Poppy, often measuring 3 inches across. Petals are of heavier texture but have the same delicate waxy appearance. Stems are longer and much stiffer which tend to hold the flowers more upright, even after cutting. Color range from deep scarlet through delicate pinks and buff to white. **Pkt., 20c.**

DOWN THE PRIMROSE PATH

Primula - Hardy Primrose

The Primrose is a splendid plant for naturalizing near shrubs or shaded nooks and moist places on the rockery. Primroses are not at home in the open herbaceous borders, but thrive in sheltered, lightly wooded places, where they may grow among the Violets, Hepaticas and Bloodroot. They generally establish themselves in damp and shaded positions which are generally most difficult to fill. Perennial.

872 VULGARIS. The old English Primrose with pale yellow flowers, 6 to 9 inches high. Grows in half shade. Mid-April to June. **Pkt., 20c.**

BASIL, SWEET. Annual. The leaves are used in vinegar, soup, stew, salad, with cottage cheese, in egg or Tomato dishes, chopped meat, sausage, in butter sauce for fish, sprinkled over Peas or boiled Potato and in vegetable juice cocktails. **Pkt., 15c.**

CHICORY, WITLOOF (French Endive). Sow in spring like Parsnips. Roots are lifted in fall, trimmed and planted during winter in a box or trench in a cellar or under a greenhouse bench, so that the neck of the root is 9 inches below the top. Fill level with sandy soil, sand, or manure; the familiar white salad appears in about a month. **Pkt., 10c.**

CHIVES. Perennial. Tops are used in soup, soft cheese, salad, vegetable cocktails and omelets, chopped very finely and added to mashed Potatoes. A mild Onion flavor. **Pkt., 15c.**

Polyanthus

(Bunch Primrose)

Showy, free-flowering perennials that should be used largely in borders, wild gardens and rockeries. If your soil is light and dry and you have no shaded situations, do not try to grow the true Primroses as offered above, but confine your efforts to the Polyanthus that we list below. The Polyanthus or Bunch Primroses will thrive in full sun if they have some moisture at the root, if not, they must be given the comfort of partial shade.

873 MRS. BERKELEY'S STRAIN. The seed of this strain is saved only from the largest flowers having the best form and special pains are taken to ensure as wide a range of colors as possible, including brilliant shades of red, orange and bronze, as well as the richest maroons and yellows, and pure white. **Pkt., 35c.**

Pyrethrum - Painted Daisy

874 HYBRIDUM. Single and double varieties, mixed. Hardy perennial, bearing large, Daisy-like flowers, ranging in color from white to deep red, with bright yellow centers; blooms in May and June, and again in the fall; and is one of the most graceful and long-lasting cut flowers. 2 feet. **Pkt., 25c.**

HERBS

CRESS. Annual. Quick growing plant, which adds that much craved peppery taste to salads. **Pkt., 15c.**

FLORENCE FENNEL. Annual. The bulbous base is eaten raw or boiled, used in fish sauces. Stems are cut and eaten like Celery. The seeds are used in flavoring. **Pkt., 15c.**

LAVENDER, VERA. Perennial. Flowers are dried and placed in the linen closet. Very fragrant. **Pkt., 25c.**

MARJORAM, SWEET. Annual. 1 to 2 ft. Used for seasoning, either fresh or dried in soups, stews, salads, and in making sausage. **Pkt., 20c.**

SUMMER SAVORY. Annual. Leaves are used in salad sauce, meat dishes, sausage, poultry stuffing, scrambled eggs, soup and string Beans. **Pkt., 15c.**

THYME. Perennial. 6 to 12 inches. Aromatic foliage, which is used for seasoning soups, stews, sauces and dressings. **Pkt., 25c.**



Scabiosa Caucasica, Blue Perfection

Perennial Scabiosa

875 ISAAC HOUSE STRAIN. A wonderful improvement in perennial Scabiosa. They are more vigorous in their plant growth, having longer and stouter stems with the average size of flower more than a third larger than the best strain of Caucasica we have seen. Outer edges are ruffled and fringed, and the colors range from a very light lavender to a dark blue. **Pkt., 25c.**

876 COLUMBARIA. This is a South African form of the European Scabiosa and although reminiscent of Caucasica, is a distinct type. It can be briefly described as a hardy, low growing perennial with fine, light green foliage; some of the flowers measuring from two and a half inches across with short compact petals, borne on long, slender, but strong stems. We offer this choice perennial in a beautiful pink shade which is a new color in Perennial Scabiosa. **Pkt., 20c.**

877 CAUCASICA, BLUE PERFECTION. 3 feet. Especially valuable for cutting, the blooms lasting an unusually long time in water. **Pkt., 15c.**

878 CAUCASICA ALBA. A huge pure white variety; the flowers, three to four in. across on long stems; exquisite for vases, lasting a long time. **Pkt., 20c.**

Sweet Rocket

(Evening-Scented Stock)

Fragrant flower heads growing 2 to 3 feet high, somewhat resemble perennial Phlox. Excellent for borders and partially shaded places.

879 WHITE. **Pkt., 20c.**

880 MIXED. **Pkt., 20c.**

A. S. T. A. GARDEN SEED
ASSORTMENT FOR EUROPE
See page 17

Sweet William - Dianthus Barbatus

A well known, old-fashioned perennial which has long been used for beds and borders. It is one of the most desirable plants in the garden, is easily grown, very hardy and free flowering, continuing in bloom for several weeks. The flowers are borne in heads or clusters, sweet scented, in brilliant colors ranging from pure white through pink, crimson, etc., to deep purple. Most of them have two colors in the same flower. They are borne on stiff stems in graceful profusion and the clusters are often 3 to 4 inches across. Useful for cutting. Height 1½ feet.

881 NEWPORT PINK. In color it is what florists call watermelon-pink or salmony rose. **Pkt., 15c.**

882 HOLBORN GLORY. The individual flowers and trusses are of extraordinary size, while the range of color, all showing a clear, white eye, is truly superb. **Pkt., 15c.**

883 SCARLET BEAUTY. Intense scarlet. **Pkt., 15c.**

884 DOUBLE MIXED. A splendid strain of this beautiful perennial, comprising a great variety of excellent shades. **Pkt., 15c.**

885 MIDGET SINGLE MIXED. 3 to 4 inches. Alpine Sweet William, uniform habit. The color range is from white, salmon, scarlet to maroon, with most blooms tri-color. **Pkt., 15c.**

886 MIDGET DOUBLE MIXED. An attractive double form of the above. **Pkt., 25c.**

Tritoma

(Red Hot Poker or Torch Lily)

887 HYBRIDA. The introduction of new, continuous flowering Tritomas has given them a prominent place among hardy bedding plants. It is not generally known that they are readily grown from seed, many flowering the first year if sown early. Of course, for immediate results it will be better to get plants, but raising them from seed is highly interesting. Perennial. **Pkt., 15c.**

Veronica - Speedwell

Hardy perennials, suitable for the border and rock gardens, of easy culture, thriving in any good ordinary soil. Cut back all faded flowers to promote new growth and additional blooms.

888 SPICATA. An elegant border plant, growing about 1½ feet high, producing long spikes of bright blue flowers in June and July. Hardy perennial. **Pkt., 15c.**

Viola Cornuta (Tufted Pansies)

A tufted plant of strong growth, bearing a profusion of faintly scented flowers the size of small Pansies. Valuable for the border or rock garden. Grows in sun or half shade, 5 to 8 inches high. If the plants are sheared several times during the season so that the flowers do not go to seed, they will bloom from late April until frost. Perennial.

889 CORNUTA MIXED. A mixture including all shades. **Pkt., 20c.**

Large Flowering Violas

890 LARGE FLOWERING MIXED. **Pkt., 35c.**

Wild Flower Seed

891 A blend of over 100 different and delightful wild flowers of the world. It will delight and surprise you. **Pkt., 15c; oz., \$1.00; ¼ lb., \$3.75; lb., \$14.00.**



Sweet William, Newport Pink



Tritoma—Red-Hot Poker

VINES—Climbers and Trailers



Hyacinth Bean

Morning Glories

The well known and popular hardy annual climbers which produce large trumpet-like flowers of many brilliant colors. Seed is sown where they are to bloom, thinning as may be desired. Height 10 to 15 feet.

900 HEAVENLY BLUE. Immense flowers of bright sky-blue; very beautiful. $\frac{1}{4}$ oz., 30c; pkt., 10c.

901 SCARLETT O'HARA. Dark wine-red, early blooming with attractive foliage. $\frac{1}{4}$ oz., 65c; pkt., 10.

902 PEARLY GATES. The flowers are a lovely lustrous white with creamy shading deep down in the throat. They average $4\frac{1}{2}$ inches across. Awarded Silver Medal, All-America Winners for 1942. Pkt., 10c.

903 RED, WHITE and BLUE MIXTURE. A mixture of the above three named varieties. Pkt., 10c.

Hyacinth Bean

(Dolichos Lablab)

A beautiful tender annual bearing large clusters of purple and white flowers which are afterwards followed by ornamental purple seed pods. Height 15 to 20 feet.

896 MIXED COLORS. Pkt., 10c.



Morning Glory

Balsam Pear and Apple - Momordica

Tender annual climbers bearing ornamental fruits of various colors. They grow 10 to 12 feet high. Have light green foliage, rather large leaves and are very graceful.

892 BALSAM APPLE. Like Balsam Pear with foliage smaller and smaller fruits, very nearly round. Green striped when young, afterwards becoming scarlet. Pkt., 10c.

893 BALSAM PEAR. Fruit oblong, pointed and warted, first green, afterwards changing to bright red. When fully ripe, burst open exposing the seed. Largely used for putting in alcohol or whiskey and used as a poultice or for cuts, bruises and wounds. Pkt., 10c.

Thunbergia - Black-Eyed Susan

An attractive climber growing 4 to 6 feet long which is largely used for garden vases, window boxes, hanging baskets, etc. Flowers are about 1 inch across, being of creamy white, buff and orange colors, with very dark brown throats; very free blooming. A very attractive plant both in foliage and in abundance of flowers.

904 MIXED. Pkt., 10c; $\frac{1}{4}$ oz., 45c.

Cardinal Climber

894 The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardinal-red clusters, 15 to 25 feet. Pkt., 15c.

Moonflowers

These beautiful climbers grow rapidly and will reach a height of 20 to 30 feet. For best results, start seeds indoors and set plants out when weather has become warm. Soaking the seed in warm water for twenty-four hours is beneficial.

898 SKY BLUE. Large, sky-blue flowers. Blooms profusely. A strong growing vine, excellent for porches, garden houses, etc. Blooms late September and October. Pkt., 10c.

899 GIANT WHITE. The vines are just covered with immense white flowers, opening in the evening and remaining open during cloudy days. Pkt., 10c.

Ice Plant - Mesembryanthemum

897 Valuable for hanging baskets, rock work, vases and window boxes. It is curious growing, the leaves and stems appearing as though covered with ice crystals. A tender trailing annual growing about 6 inches high and the vines will extend 2 feet long. Pkt., 10c.

Cypress Vine

A beautiful rapid growing climber with delicately cut, vivid green foliage and starlike flowers which make a most effective contrast with the leaves. Annual. About 15 feet high.

895 MIXED. Scarlet and white. Pkt., 15c.

Seeds of Curious and Ornamental Gourds

Interesting in the Garden—Decorative in the House

Rapid growing annual climbers suitable for sowing around arbors, trellises, fencing, etc. Large-fruited gourds are used as dippers, bird houses, etc., and the small-fruited gourds are enormously popular for table decorations.

Culture. Gourd seeds are usually sown in the open ground in May. For an early crop seed may be sown in pots placed in hotbeds and set out into the open ground when all danger of frost is past. This adds to the time of maturing the gourds on the vine. When very large fruits are desired, only two or three should be left on each plant. The branches should then be cut a few leaves beyond the last fruit. Do not let vines suffer for lack of water.

Small Fruited Gourds (C-Pepo)

905 SMALL VARIETIES MIXED. Pkt., 10c; oz., 50c.

Large Fruited Gourds (Lagenaria)

906 LARGE-FRUITED VARIETIES MIXED. Pkt., 10c; oz., 50c.

Agricultural Seeds

Prices on all Field Seeds are subject to fluctuations. We will be glad to quote you firm prices on request. Orders entrusted to us will be filled at the lowest price on day received.



ACME Brand FARM SEEDS Tested for Your Protection

Ask for SPECIAL descriptive CIRCULAR on items marked with ★.



Look for this emblem, and the red, white, and blue tag attached to the bag, denoting United States Verified Origin Red Clover and Alfalfa. We issue these certificates under United States Department of Agriculture supervision.

This is for your protection. You should know where the seed you buy is grown.

★ **LESPEDEZA**, Korean is an annual legume, and under favorable conditions will reseed itself. It is best adapted to thin or acid soils. 15 to 25 pounds usually sown per acre from February to April 15th. **Sericea** is a perennial Lespedeza. Scarified seed can be sown at the rate of 4 to 5 pounds per acre in spring after danger of frost and as late as April 15th.

RED CLOVER (*Trifolium pratense*). Too well known to need extended description. Best sown in the spring, and requires 8 to 12 lbs. per acre alone or 5 to 6 lbs. per acre if in mixture with grasses.

MAMMOTH OR SAPLING CLOVER. Similar to Red Clover but of larger growth and blooms three weeks later, hence more valuable for sowing with Timothy. It also forms better aftermath than Red Clover. Requires same quantity of seed as Red Clover per acre.

ALSIKE CLOVER (*Trifolium hybridum*). One of the best Clovers for sowing with Timothy, as they mature at the same time. Blossoms flesh color. It is very hardy and will do well on thin or poorly drained soils, making very satisfactory pasturage. It is also valuable for hay. If sown alone requires 4 to 6 lbs. per acre or in mixture 2 to 3 lbs. per acre.

★ **CRIMSON CLOVER** (*Trifolium incarnatum*). An annual for turning under as a green manure crop or as a winter cover crop sown in July or August, also early spring at rate of 15 to 20 lbs. per acre. It should be cut just before bloom stage for hay.

★ **LADINO CLOVER**. A mammoth perennial type of White Clover. Shallow but vigorous roots with large leaves on sturdy stems. Valuable for pasture on dairy farms, and is widely used for enriching a mixture of other grasses. Sow 3 to 5 lbs. per acre.

WILD WHITE CLOVER. Long used in England in permanent pastures. More leaf and less blossoms than ordinary White Dutch Clover. Very hardy and highly recommended in pasture mixtures. Sow 1 to 2 lbs. per acre in mixtures.

BIRDSFOOT TREFOIL. A low growing perennial legume for pastures. Starts slowly but has long season. Inoculated, it thrives on ground too poor for Alfalfa. It takes several years to establish.

★ **SMOOTH BROME GRASS**. A tall perennial, does well on loose, dry soil. Used with Alfalfa to produce hay and pasture during hot, dry seasons. Sow 15 to 20 lbs. per acre.

★ **REED CANARY GRASS**. An excellent hay crop for moist or swampy land. Sow 6 to 8 lbs. per acre with 2 lbs. Alsike to insure uniform stand.

SWEET CLOVER. Valuable for use on poorer soils both as a crop and for improving the soil.

Tall Growing Type. Planted in the spring makes good growth by fall and lasts 2 years. Will reseed itself if left standing.

Yellow Blossom Type. Is also biennial. Grows 2 to 3 feet the first year, 4 to 5 feet the second. Finer stems, better for hay and pasture.

Sow 10 to 12 lbs. per acre **Hulled and Scarified Seed** in fall or spring after frost danger. Sow 20 lbs. per acre **Unhulled Seed** during the winter months or in the fall with Winter Wheat.

ALFALFA. Every farm should have a field of this crop. It has a higher feeding value than any other hay. Alfalfa can be sown in many different mixtures. It is sown alone at the rate of 12 to 15 lbs. per acre. Write us about rate of seeding, and other recommendations. In addition to spring seeding, when sown alone, it can be sown successfully in July and August in various special mixtures.

Alfalfa should be sown on a well-prepared seed bed. Adequate liming is necessary, and proper amount should be determined by a soil test. It is also very important that seed be inoculated.

Common Alfalfa. Has a purple bloom and tends to develop a single deep tap root system. It is generally found to produce more hay than the Grimm type, except when winter killing takes place.

Grimm Alfalfa. Has a variegated bloom and is characterized by a tendency toward a multiple root system. For this reason it is understood to be hardier than the Common type.

Inoculate all Legume Seeds with

NITRAGIN

1898—A HALF CENTURY OF SERVICE—1948

When ordering, Always state name of seed.

ALFALFA (A)

Swt., Bur, Hubam Clovers	
Size	Retail
1 bu. each...	.50
2½ bu. each...	1.00

CLOVERS (B)

Red, Alsike, Crimson, White and Ladino.	
1 bu. each...	.50
2½ bu. each...	1.00

LESPEDEZA (L)

100 lb. size (Inoculates up to 100 lbs.)	..\$.50
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PEAS, VETCHES (All Varieties) (C)

100 lb. size (Inoculates up to 100 lbs.) ea.	\$.50
1200 lb. size ea.	5.70
(12-100 lb. cans)	

LUPINES (All Varieties)

100 lb. size (Inoculates up to 100 lbs. seed) ea.	\$.50
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GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans
Enough for 8 lbs. seed — Retail Price 10c each

SOYBEANS (S)

Size	Retail
Small, (Inoculates up to 120 lbs. seed)	\$.30
5 bu. each.....	.55
25 bu. each.....	2.50
(One can)	
30 bu. each.....	3.25
(6-5 bu. cans)	

BEANS—Navy, Pinto, Wax, String, Kidney and Great Northern
1 bu. each\$.35

PEANUTS, COW PEAS (E)

Small, (Inoculates up to 120 lbs. seed)	\$.30
5 bu. each.....	.55
25 bu. each.....	2.50
(One can)	
30 bu. each.....	3.25
(6-5 bu. cans)	

AGRICULTURAL SEEDS — Continued

OAKS, Northern White, Clinton, Columbia, and Vicland. Our Oats are carefully selected and well re-cleaned. Do not confuse them with ordinary feed oats. Sow $1\frac{1}{2}$ to $2\frac{1}{2}$ bushels per acre.

OATS, Winter Turf Oats. For fall and spring sowing. 4 to 5 ft. high; straw is very palatable for stock. $1\frac{1}{2}$ to 2 bus. per acre.

VETCH, Hairy or Sand (*Vicia villosa*). Winter annual, adapted to sandy soil and will do much to build up any soil especially when inoculated. Withstands cold weather. Should be sown from late August to middle of September at rate of 15 to 25 lbs. per acre. Can be sown with rye.

Spring Vetch (*Vicia sativa*). Used with oats for producing spring hay.

CANADA FIELD PEAS. Grown with oats will make a fodder or hay which doubles the production of milk. Should be sown in March or early April, 90 pounds of peas to two bushels of oats to the acre. The Peas should be sown first and plowed under about 4 inches deep; the oats then sowed and harrowed in. They will be ready for cutting about the end of June, when oats are in milk and the pods formed on Peas. Write for prices.

SUNFLOWER, Mammoth Russian. The best variety for the farmer. Drill in seed at about 8 to 10 lbs. to acre. It is much relished by poultry and horses. Current prices on request.

BROOM CORN. We carry varieties that are known to produce the finest quality straw, and command the highest prices. Sow 4 to 5 lbs. per acre in drills, rows 3 feet apart. Thin out the stalks to about 70 to the rod. Cultivate same as corn. Cut when seed is in the milk.

MILLET, True Tennessee Cultivated. (Round Seed). This Millet withstands drought better than all other varieties. It is used as a summer hay crop and particularly adapted to rich or bottom soils. It should be sown thickly and cut when the heads are in bloom, never allowing it to get old or seed to form as this causes a great drain on the soil besides materially injuring the quality of hay. Very useful for cleaning rich, foul lands of weeds as its quick, abundant, luxuriant growth smothers most weeds. Sow one bushel per acre in May, June, or July. Two crops can be seeded on the same land in one season, if desired.

MILLET, Home Grown. Produces a large head. A very desirable feature is its earliness; the foliage is also very heavy and the leaves broad. It produces an immense amount of excellent fodder which cures very readily.

HUNGARIAN. Specially adapted to rich or alluvial soil. It makes a finer quality of hay than Millet on very rich soil as it does not grow so coarse. Cut at the right time, which is in bloom, and cured properly, it makes a nutritious hay; is especially popular with dairymen. Sow from three-fourths to one bushel per acre in May, June or July.

BUCKWHEAT. A splendid crop for poor land. Largely used for bees. Sow in June, July or August at rate of three-fourths to one bushel per acre broadcast, covering with a smoothing harrow. It does not mature grain until the cool nights—hence, too early sowing is not desirable.

KAFFIR CORN. Foliage and stalks do not contain saccharine matter, hence are not so valuable for feeding, but the enormous yield of grain makes it very profitable. The grain is very largely used for poultry and stock feeding, containing a high percentage of starch.

SOY BEANS are today a leading crop, valuable not only as a grain for milling, but for hay and forage. They are also excellent for soil improvement when plowed under as a green manure crop. Inoculation of soy beans is beneficial regardless of purpose of crop. Sow $1\frac{1}{2}$ bus. per acre drilled solid or 45 lbs. in rows for cultivation. The following varieties are some of the best for this section. Write for variety descriptions and current prices. **Best for Hay Crop: Wilson Black, Kingwa, and Virginia Brown. Yellow Varieties: Early-ana, Lincoln, Richland, Scioto, Dunfield, Mingo, and Illini.**

COWPEAS—The Great Soil Improving Crop. Grow best on light or sandy soils. Have a high feeding value. Belonging to the bean family, they are nitrogen gathering plants and if inoculated will improve the productiveness of the soil. We carry the following varieties: **New Eras, Whippoorwill, and Mixed Varieties.** Sow $1\frac{1}{2}$ bus. per acre after danger of frost. Use Nitr.agin Inoculator.

RYE, Northern and Balbo. Our Rye is carefully selected stock, or well re-cleaned and tested. Do not confuse it with ordinary milling Rye.

BARLEY needs a rich land and lighter than that adapted to wheat. It should be cut before fully ripe, if for hay, as it is then of better quality, and less liable to shell. Sow $1\frac{1}{2}$ to 2 bushels if drilled; 2 to $2\frac{1}{2}$ bushels broadcast. (48 lbs. per bu.) We usually carry the following spring varieties:

BARLEY, Oderbrucker Bearded. Yields heavily and most commonly used in this section.

BARLEY, Spartan Bearded. But has smooth barbless beards.

BARLEY, Velvet or Barbless. A bearded variety.

Also for fall sowing we offer:

BARLEY, Winter or Fall Bearded. Very desirable in this area because of its yield and quality.

WHEAT, Thorne, Fairfield, and Vigo.

DWARF ESSEX RAPE. Makes excellent pasture for both sheep and hogs, and is a fine conditioner for all livestock, except milk cows. Best results are obtained by planting in two separate fields; pasturing alternately ten days each. Plant any time, early spring to midsummer. Sow 3 pounds per acre in drills; 6 pounds broadcast.

SUDAN GRASS. Sudan Grass produces an immense yield of nutritious hay. It can be cut twice in a season if planted early in the season but after frost danger. Grows 3 to 5 feet high. It is adapted to growing in all kinds of soil but produces the largest yield in warm, temperate latitude. After first cutting it stools enormously and then furnishes exceptionally fine pasture for all stock, except milk cows. It is killed by the first frost. Eight to twelve pounds in drills, $2\frac{1}{2}$ to 3 feet apart or broadcast 20 to 30 pounds per acre.

CANE SEED FOR FORAGE.

ATLAS SORGO. A forage and grain crop, outstanding for its heavy yield. Has a juicy, sweet, leafy stalk, which grows 7 to 10 feet and requires 120 to 130 days to mature. Usually sown 5 to 10 pounds to acre.

McCULLOUGH'S BUCKEYE BRAND

Open Pollinated Field Corn

WHITE VARIETIES

Johnson Co. White Dent. A popular variety. Large, tapering ears, deep kernels slightly dented; medium late maturing.

Hickory King. Yields 2 to 3 ears a stalk; large flat grains on small cob. Extensively used for green table corn or roasting ears, also for early ensilage.

Virginia Ensilage. One of the best silage varieties, yielding record tonnage; late maturing.

Red Cob White Ensilage. A very popular variety; excellent for silage or green fodder.

YELLOW VARIETIES

Woodburn Yellow Dent. An early maturing favorite. Medium sized well-filled ears; deep grains, small cob, exceptional yield.

Leaming. An ideal feeding variety. Medium late maturing, large tapering ears, 16 to 22 rows on red cob.

Reid's Yellow Dent. A very popular heavy yielder, late maturity, long well-filled ears even under adverse conditions.

Yellow Clarage. Medium early maturity. Produces a well-filled medium-sized ear.

FOR HIGHER YIELDS TREAT WITH SEMESAN JR.

McCullough's Buckeye Brand Field Corn

McCullough's Buckeye Brand Field Corn is carefully selected, tested and graded. Ask for current prices, stating variety in which you are interested.

McCULLOUGH'S BUCKEYE BRAND

Certified Hybrids

For central states area:

Iowa 939

W17

Ohio C38

Indiana 620-608

U. S. 13

Indiana 813

Ohio W-36

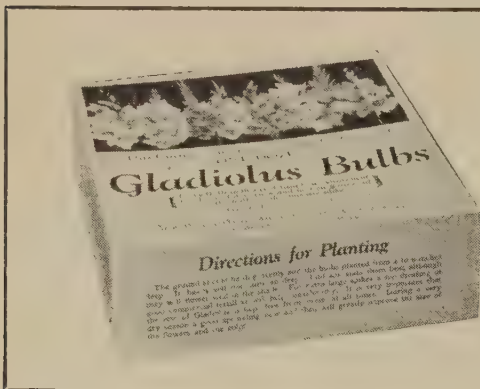
Kentucky 102

White Ky. 203

★Write for our complete 1948 descriptive circular.

SPECIAL GLADIOLUS COLLECTION

Twelve Number One Gladiolus Bulbs



A collection of 12 Number 1 Gladiolus bulbs—
one each of 12 choice, distinct, different varieties.
Cultural directions on each package.

Per box **65c**

From planting time, blooms
appear in 70 to 90 days.

CONTROL INSECTS
Use DDT or Tartar Emetic
beginning when plants are 6
inches high to blooming time.

GLADIOLUS

"EVERYBODY'S ORCHID"

Not less than 6 bulbs at the
dozen rate, or 25 at the 100
rate.

Blue Shades

BLUE BEAUTY. (Early.) Medium blue
shading darker toward the edges. Large,
wide open blooms; tall, strong grower. Best
medium blue on the market. Makes a grand
spike. Stock is always scarce as it is rather
a slow propagator. **Per doz., 90c; per 100,**
\$7.25.

PURPLE BEAUTY. Reddish purple, per-
fectly arranged flowers. Strong grower. A
spike of beauty that is gorgeous. **Per doz.,**
\$1.10; per 100, \$8.75.

MINUET. Beautiful light pinkish lavender.
Opens 5 to 6 well placed blooms on a medium
height plant. This variety has been the
standard commercial lavender for many years
and is still going strong. **Per doz., 80c;**
per 100, \$6.25.

ELIZABETH THE QUEEN. (Midseason.)
Beautiful clear lavender-mauve with darker
lines in the throat. Beautifully ruffled
and fine form. Opens 7-8 at a time. When well
grown it is a fine exhibition variety. Don't
know of any other lavender that can touch it
for beauty. **Per doz., \$1.50; per 100,**
\$12.00.

KING LEAR. (Very early.) Clear deep red-
dish purple. Silver line on the edge of all
petals. Opens 5-6 large, beautifully ruffled
blooms on a tall, strong plant. Different
from any other purple on the market. **Per**
doz., 85c; per 100 \$6.75.

Bicolors

BADGER BEAUTY. (Midseason.) Beautiful
lavender with creamy white throat. Opens 5
wide open blooms with a total of 17 buds on a
medium height plant. **Per doz., 85c; per**
100, \$6.75.

BEACON. Clear bright rose-scarlet with large
cream blotch. 8 to 10 medium large ruffled
blooms open on a very tall straight though
willowy spike. One of the most popular cut
flower varieties. **Per doz., 80c; per 100,**
\$6.25.

CAMELLIA. An exquisite medium season
bloomer. Color a bluish-white, with scarlet
feathered throat. Large flowers, well placed
on a strong spike. **Per doz., 85c; per 100,**
\$6.75.

CORONA. Creamy white shading more creamy
toward the throat with a rose picotee edge on
all petals. Very distinctive and beautiful va-
riety. Opens 6 to 8 wide open blooms on a
head of 16 to 18 buds. Tall, strong, husky
grower. Heavy propagator. **Per doz., 95c;**
per 100, \$7.25.

MARGARET BEATON. Pure snow-white
with small orange-scarlet blotch in the throat.
Six or more large well-placed blooms open
on a long flower head. Strong grower and
good propagator. This variety is very beau-
tiful and has created a sensation everywhere
it has been shown.
Per doz., 85c; per 100, \$6.75.

LA FIESTA. Here is a tall, rich orange Glad.
Vigorous grower. Excellent cut flower va-
riety in a color field where good varieties are
few. **Per doz., 85c; per 100, \$6.75.**

Pink Shades

ETHEL CAVE-COLE. Pure light pink,
sometimes flecked. Very strong, husky grow-
er. Makes a large spike with 9 to 10 large,
well placed blooms on a head of 20 to 24
buds. Good for exhibition, commercial or
home garden. **Per doz., 80c; per 100, \$6.25.**

SWEET SEVENTEEN. A lovely light rosy
pink with creamy blotch. The florets are well
placed on an upright stem and makes a long
spike with 6-8 open blooms at a time. A first
class midseason cut flower and exhibition va-
riety. **Per doz., \$1.00; per 100, \$8.00.**



ROSA VAN LIMA. Large formal. Early
season. Light rose with few darker lines in
the throat. Eight or more large well-placed
blooms on a tall, strong spike. A fine com-
mercial variety. Grand for exhibition. **Per**
doz., 80c; per 100, \$6.25.

Red Shades

ALGONQUIN. (Early.) Brilliant glowing
scarlet. Opens 8-10 large, wide open, well
placed, ruffled, needlepoint blooms on a tall,
straight spike. Conceded by most growers to
be the best cut flower in its shade. Fine for
exhibition. **Per doz., 95c; per 100, \$7.25.**

NEW EUROPE. Vivid light orangey red, with
small purple stripe in throat. Tall, strong
plant, enormous florets. 8-10 open. Rather
late bloomer but rapid propagator and
healthy. **Per doz., \$1.00; per 100, \$8.00.**

ROCKET. Immense spikes of a bright red.
Very good commercial. Good grower. One
of the best reds. **Per doz., 90c; per 100,**
\$7.25.

SOUTHERN CROSS. A tall-growing, rich
red. Straight spike. Good propagator. **Per**
doz., 75c; per 100, \$6.00.

RED LIGHTNING. Bright pleasing red,
with cream blotch in the throat. Good spike
of many open flowers. A color that strikes
you. **Per doz., 85c; per 100, \$6.75.**

STOPLIGHT. Clear medium red of fine
texture. Ruffled blooms are well placed. 5 to
7 blooms open. A florist variety of the best.
Per doz., \$1.30; per 100, \$10.00.

CHARMAINE. Large salmon. Opens six or
more well-placed blooms. This can be grown
as an exhibition or commercial. **Per doz.,**
80c; per 100, \$6.25.

PICARDY. Truly immense spikes carry as
many as 8 huge open flowers. Color is rich
salmon-pink. A sensational glad. **Per doz.,**
85c; per 100, \$6.75.

White

MAID OF ORLEANS. Beautiful milky white
with cream throat. Tall sturdy grower with
eight or more well-placed flowers open at a
time. **Per doz., 80c; per 100, \$6.25.**

SNOW PRINCESS. A fine white. Great
commercial value. This variety is vigorous
and produces excellent spikes with three or
more blooms open at one time. **Per doz.,**
85c; per 100, \$6.75.

MYRNA. Early midseason.) Heavily ruffled
ivory-white. Opens many well placed, heavily
ruffled blooms at a time. A fine exhibition
variety. Very popular. **Per doz., 90c; per**
100, \$7.25.

Yellow

OREGON GOLD. (Midseason.) Light creamy
yellow that open 9-10 large, somewhat ruffled
blooms on a very tall plant with a long flow-
er head. Considered one of the best yellows.
Per doz., \$1.25; per 100, \$10.00.

LEADING LADY. (Midseason.) A cream-
white sport of Picardy which is just like its
parent at its best except for color. One of
the best commercials and wonderful exhibi-
tion variety. Wins at all the shows. There
is a tremendous demand for this variety.
Per doz., \$1.50; per 100, \$12.00.

LADY JANE. Clear cream-yellow with yel-
low lip petals which gives the flower the
appearance of yellow. Opens 6 to 8 large,
slightly ruffled blooms which are always well
placed and of fine texture. **Per doz., \$1.25;**
per 100, \$10.00.

WHITE GOLD. Very large, clear light cream
shading to a golden throat. 4 to 6 huge, well
placed blooms open on a long head. Tall and
very vigorous and a good propagator. Can be
grown to produce amazing spikes of bloom.
One of the best of the creams. **Per doz.,**
\$1.30; per 100, \$10.00.

MCCULLOUGH SUPER MIXTURE. Large
size bulbs. Brilliant colors and shades. **Per**
doz., 60c; per 100, \$4.50.

CULTURAL HINTS

Flow or spade your soil deep.
Use a balanced fertilizer.

Plant 4 to 6 inches deep, 3 feet apart for miniature varieties, and 4 feet for larger varieties.

Regular cultivation is essential.

Cactus

NANCY ANN MITCHELL. Vivid scarlet. Perfect formation and stems have made this a consistent winner for the past two years. Bush growth satisfactory and very prolific. Root, \$1.00.

YELLOW GLOBE. Color clear lemon-yellow. Big, strong bushes 5 feet high. Perfectly formed flowers that have fine substance. This dahlia grows well anywhere. Root, \$1.00.

BATAAN. A beautiful scarlet tipped gold on good stems. Very profuse with good vigor and foliage. A very worthy variety. Root, 75c.

MISS BAINBRIDGE. A blooming pink of perfect form. Long stems and a good habit of growth. Bush vigorous, free branching and medium tall. A good exhibition pink. Root, \$1.00.

HILLSIDE GOLD. Golden yellow with a beautiful apricot glow. Bushes branch naturally and flowers are held well above foliage. Fine for exhibition, cutting and baskets. Root, 75c.

Semi-Cactus

EDGAR GUEST. The prettiest yellow it has ever been our privilege to grow. The blooms come mostly Semi-Cactus, and are produced heavily from early till late. Long, straight stems and free branching plants. Root, \$1.25.

GREATER GLORY. In our section nearly every bloom is Cactus. Bloom 10x5 in. Bush 4 feet. A deep rose-pink with light yellow shadings at center. It nearly always wins in the pink class. Root, \$1.25.

LYNN FONTANNE. A giant flower with excellent, vigorous growing habits. Color is light red. Stems strong and straight. Comes into bloom about midseason. Root, \$1.00.

MICHIGAN WHITE. A prolific bloomer. May be described as an improved Star of Bethlehem with good substance. A fine white commercial. Root, 75c.

Formal Decorative

BEGONIA ROSE. The extra long stems, the superb color of Raspberry-rose, and its keeping qualities, combined with extra freedom of bloom and insect resistant growth, make it a florist's flower extraordinary. Extremely early. Root, \$1.00.

COMMANDO. True phlox-purple. Large flowers averaging 10 inches in diameter. Long, stiff stems. Bush very healthy. One of the finest lavender-purple varieties. A giant that is tops among the big ones. Root, \$1.00.

BLUE ROSE. Very light pastel lavender-pink. A strong growing plant with extra heavy foliage. The blooms are produced in profusion from September first on and are all of such a high quality that they make a valuable flower for the florist. Very long, strong stems. Root, \$1.00.

MARIE. A real pink of the most vigorous habits and a big root maker. 4-5 inches. 5 feet. Useful for cutting and one of the best garden Dahlias. Root, 50c.

D-DAY. This one-tone bright pink won a special award, as the flowers shipped to the

DAHLIAS

New York A. D. S. Show were in fine shape after 72 hours en route. Has cane-like stems, is prolific, and is fine for florists' use. Root, \$1.00.

BUCKEYE KING. A giant gold formal that is almost unbeatable on the show table. An old variety that is better than most new ones in the same class. Vigorous and free. Root, 75c.

THE REAL GLORY. A white flower with fine stems. Texture of bloom is firm. Is gaining more popularity every season. This one is a winner. Root, \$1.00.

THE GOVERNOR. Color light yellow. Fine form and uniform centers. Early to bloom, it gives abundance of flowers. Blooms become larger throughout the season. Substance is ideal with good stems. Root, \$1.00.

VICTORY. Color golden pink. A robust grower with perfectly formed flowers. Here is a very reliable grower. Becoming more popular every season. Root, \$1.00.

Informal Decorative

CHEROKEE BRAVE. Here is a red that does not fade or burn. Very artistic form and extra long stems. A variety that is reliable. Root, \$1.00.

DIXIE'S WINE DOT. An ivory-white, streaked with brown to red markings. Sturdy growers. Insect resistant foliage. This novelty is a good one. Root, \$1.25.

CARL G. DAHL. One of the greatest winners of all large, modern exhibition Dahlias. Carl Dahl can be easily grown 12 inches and has been grown 16 inches. Blooms have a loose, open formation with large petals curled slightly. Color is apricot-buff, shaded old rose on reverse of petals. Root, \$1.00.

DAHLIA MUM. Color is deep orange. A tremendous flower with long, twisted petals that roll back to the stem, making a complete ball. Bushes massive and wide spreading. One of the strongest growing Dahlias in existence. Root, \$1.00.

SOUTHERN ROSE. A deep bright rose-pink with lighter shadings. Very satisfactory for the garden or exhibition. Healthy, vigorous grower. Root, \$1.25.

MARGRACE. Unusual in color and unique in form. Bright cardinal with a tan reverse. Good high centers, and strong, heavy stems. Has vim, vigor and vitality. Root, \$1.00.

WHITE WINNER. A white with more petal substance than any other white we have grown. Early and profuse, does not burn, and is most satisfactory for cutting. Long, erect stems. Root, \$1.00.

PINK GIANT. Tyrian-pink. This brightest of pink shades has long been lacking in a good dahlia. Pink Giant is a grand garden dahlia with big, strong, upright bushes, fine stems and plenty of bloom. Early. Root, 75c.

GLAMOUR. Color purple. This is a strong grower producing flowers of uniform texture and of great size. Stems are perfect. For exhibition it is hard to beat. Root, \$1.00.

KENTUCKY SPORTSMAN. This bicolor of orange and white is a reliable performer. Vigorous, good stems, plenty of blooms. A novelty that is tops. Root, \$1.00.

AXFORD TRIUMPH. Color is deep golden orange. This is one of the easiest Dahlias to raise that we know of, and will give strong competition in the orange class. Bushes medium tall, foliage very tough. Stems and pose of flower are all that can be desired. Root, \$1.25.

CONTROL INSECTS

Use D-X Spray and Deenate 50, W during the growing season. Dow spray 17 for red spider.

COL. A. G. RUDD. Rich carmine with deeper mahogany-red at the center. It is a real factor in the red classes. Strong, tall grower. Root, \$1.50.

LEDICE. A strong, vigorous grower producing an abundance of fine blooms. The color is a delicate ivory-cream deepening to yellow at the centers. Root, 75c.

SANTA CLAUS. A bi-color of scarlet tipped white and with the scarlet overlaid buff-yellow. Petals pointed and whirling like a pinwheel. A truly beautiful flower. Root, \$1.00.

YOUR LUCKY STAR. A great favorite in our gardens. An unusual combination of dainty coloring in a large flower. The outer petals are lilac-pink shading to a distinct white at the centers. Root, \$1.00.

WHIRLAWAY. This is a yellow of informal markings. Fine bloomer and stiff stems. A real aristocrat. Foliage excellent. Can compete with the best. Root, \$1.00.

WORLD EVENT. Rose-pink in color, this fine Dahlia has met with great demand. Has all the good qualities desired. A Dahlia that you must have. Root, \$1.00.

Pompons

BETTY ANNE. A perfectly formed light pink that is very popular. A good grower producing abundance of flowers. Root, 50c.

CLOVER. White tinged soft pink. Prolific in blooms, all of which are small and of fine form. Root, 75c.

RHONDA. One of the best Pompons in this list. Very small with numerous, finely quilled petals. Pink and lavender, lighter toward center. Root, 75c.

CREAM GEM. A beautiful waxy white. Perfect form, strong grower and profuse. Root, 75c.

HONEY. Pale yellow with faint suffusion of red on edge of petals. Free bloomer, long stems fine for cutting. Root, 50c.

Miniature

ANDREAS ORANGE. True orange color. Profuse bloomer on fine long stems. One of the best Miniatures. Root, 75c.

BABY SAGAMORE. Here is an amber colored gem that is always covered with fine formed flowers. Extra long stems. Vigorous. Root, 75c.

LITTLE BUDDY. A soft lemon-yellow that is a wonderful cut flower. Plenty of substance. Profuse and early. Root, 75c.

LITTLE WISTERIA. White suffused lavender showing darker at center. General tone soft lavender. Good for cutting. Root, 75c.

MRS. CLARA COWELL. Rich Pansy-purple shading to true purple at outer edges. Pointed petals. A little late, but beautiful. Root, 75c.

ORANGEADE. Orange with a deeper center. Excellent keeper, profuse and uniform in size. Exceptionally strong stems. Root, \$1.00.

WHITE FAWN. Best pure white of its kind so far. Rugged bush, heavy foliage, and prolific. Root, 75c.

SNOWSPRITE. Glistening snow-white in color with perfect stems and artistic form. Stands out in the garden as it is always in bloom. Centers are always good and flowers remarkably uniform. Roots, 75c.

Begonia**TUBEROUS-ROOTED**

If early flowering is desired, start tubers in January or February. Provide a box or open flat. Cover the bottom with one inch of sphagnum moss or peat moss, placing the bulbs on the moss about 3 inches apart, slightly covering the tubers. Keep moist, but not too wet, and in a warm place, well lighted, until 3 or 4 inches of growth develops. Then plant in pots or permanent position. Bulbs may also be planted outdoors, about 8 inches apart, about the middle of May. Select a moist shaded situation, under trees, in a light, loamy soil. Good drainage is essential.

DOUBLE CAMELLIA TYPE

An improved double strain which greatly resembles the Camellia in form of flower.

Pink White Yellow Orange Red
Largest Size Bulbs, 2 inches and up:
Each 35c; \$3.50 per doz.; \$25.00 per 100.

Fancy-Leaved Caladium

Foliage plants with rich and gorgeous, yet soft coloring. For the conservatory or for outdoor bedding in shady or semi-shady positions during summer. Bulbs do best if started in pots, planting one to a 6-inch pot, setting outdoors in late May. 25c each; \$2.50 per doz.

BULB FOOD

A special food for Dahlias, Gladiolus, and all bulbs.

5-lb. bag\$0.65

10-lb. bag 1.15

Cannas**Dormant Roots**

Cannas do well in full sun and respond quickly to fertilizing with well rotted manure. Blooming from early summer till frost.

CITY OF PORTLAND. 4 feet. Rich deep pink.

KING HUMBERT. 4½ feet. Scarlet flowers. Bronze foliage.

THE PRESIDENT. 4 feet. A rich glowing scarlet. Green foliage.

YELLOW KING HUMBERT. 4½ to 5 feet. Flowers yellow, spotted red. Green foliage.

WINTER'S COLOSSAL. Vivid scarlet, green foliage. 5 ft.

WYOMING. Orange flower with bronze foliage. 4 to 5 ft.

Price, Selected Roots:
15c each; \$1.50 per doz.; \$10.00 per 100.

Fertilizers for Lawn and Garden

More Plant Feeding Value With AGRICO PER POUND AND PER DOLLAR



Different plants require different plant-food diets; that's why AGRICO comes in two special-purpose grades for the home user—one special AGRICO for Lawns, Trees and Shrubs; and another special AGRICO for Vegetable and Flower Gardens.

AGRICO for LAWNS, TREES and SHRUBS 6-10-4

Size pkg.	Price
100 lbs. . .	\$4.00
50 lbs. . .	2.25
25 lbs. . .	1.35
10 lbs. . .	.80
5 lbs. . .	.45

AGRICO for GARDENS 4-12-4

Size pkg.	Price
100 lbs. . .	\$4.00
50 lbs. . .	2.25
25 lbs. . .	1.35
10 lbs. . .	.80
5 lbs. . .	.45

AGRICO - the Nation's Leading Fertilizer



PLUS WEED KILLING 2, 4-D

The new double acting WEDO is a scientific balanced formula of lawn feeding elements plus weed killing 2, 4-D.

Now at last you can enjoy the beauty of a velvety green, weed-free lawn. One application feeds grasses and kills weeds. Clean, granular. Simply apply with lawn spreader. Priced right so that you can afford to use it over your entire lawn area. 25 lbs. will cover a lawn 40 feet by 40 feet. Packed in two convenient sizes. 25 lbs., \$2.75; 100 lbs., \$7.95.

SACCO PLANT FOOD MAKES THINGS GROW 4-12-4

The Complete All-Purpose Plant Food
Famous for Results

Size of Pkg.	Price	Size of Pkg.	Price
100 lbs. . .	\$3.75	10 lbs. . .	\$0.80
50 lbs. . .	2.50	5 lbs. . .	.45
25 lbs. . .	1.45	1 lb. . .	.10

SACCO G & F FERTILIZER 10-6-4

A Golf Course Formula for Fine Lawns

Size of Pkg.	Price
100 lbs. . .	\$5.50
25 lbs. . .	1.85



VELVETGREEN 5-10-5

PLANT FOOD FOR LAWNS, FLOWERS,
VEGETABLES, SHRUBS

100 lbs. . .	\$4.00	10 lbs. . .	\$0.85
25 lbs. . .	1.50	1 lb. . .	.12

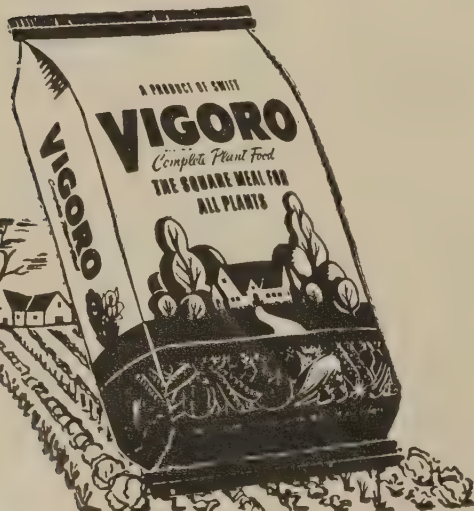


VIGORO

COMPLETE PLANT
FOOD FOR LAWNS,
TREES, SHRUBS,
FLOWERS AND
VEGETABLES

4-12-4

1 lb. . .	\$0.12
5 lbs. . .	.45
10 lbs. . .	.85
25 lbs. . .	1.50
100 lbs. . .	4.00



SHEEP MANURE

Contains the Same Elements as Stable Manure
Dried—Pulverized

Provides valuable nitrogen, an abundance of humus, and the essential plant food elements needed to make all plants thrive. Safe, weedless, economical.

The Flower and Vegetable garden is particularly benefited by the use of Pulverized Sheep Manure. It should be spread at the rate of 100 lbs. to 1,000 square feet or 2,000 to 3,000 lbs. to the acre, applied after plowing just before the final harrowing.

Grass. Use 100 lbs. per 1,000 square feet. Scatter broadcast over the old lawn or rake thoroughly into the top soil a day or two before seeding a new one.

Florists and Gardeners. In potting soil, one part Sheep Manure to six parts soil is the usual proportion. For liquid use 1 lb. of the manure to 5 gals. of water. In Carnation, Chrysanthemum or Rose houses it is often used for a light top-dressing.

34-oz. pkg.	\$0.25	50-lb. bag	\$ 2.25
5-lb. bag . . . . .	.40	100-lb. bag	3.50
10-lb. bag . . . . .	.75	500 lbs.	16.25
25-lb. bag	1.35	1000 lbs.	30.00

CATTLE MANURE

A strictly organic fertilizer.

An ideal soil builder and mulch. Easy to apply as a top dressing. When applied to lawns of poor soil texture it has the decided advantage of binding sandy soil and breaking up a clayey condition. Ideal for Roses.

Broadcast at the rate of 100 lbs. per 1,000 sq. ft.

26-oz. pkg.	\$0.20	20-lb. carton	\$1.35
3½-lb. pkg. . . . .	.40	50-lb. bag	2.25

SPECIAL ROSE FOOD 7-8-5

An all-organic plant food made especially for Roses. Safe for continuous feeding. 1 lb., 20c; 5 lbs., 65c; 10 lbs., \$1.15; 25 lbs., \$2.50; 100 lbs., \$8.50.



BULB FOOD 5-6-15

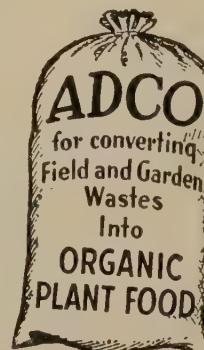
A plant food made especially for bulbs. 5 lbs., 65c; 10 lbs., \$1.15.

RHODO-AZALEA FOOD 3-20-3

An acid fertilizer designed especially for acid loving plants, such as Rhododendrons, Azaleas, etc. 5-lb. bag, 65c; 10-lb. bag, \$1.25.

ADCO

Mix ADCO with leaves, weeds, vines, clippings, cuttings, straw, cornstalks, etc., and turn them into rich plant food. 7½ lbs., \$1.25; 25 lbs., \$2.75; 100 lbs. (4-25s), \$10.50; 150 lbs., \$13.25.



COMPO

Makes rich organic manure from garden waste. Converts leaves, weeds, grass clippings, etc., into valuable material necessary to good garden soil. 7½ lbs., \$1.00; 25 lbs., \$2.00.



LAWN and GARDEN FERTILIZERS

ALUMINUM SULPHATE. A material used in creating acid soils, in which Azaleas, Rhododendrons, and similar plants are grown. Use one pound to 10 square feet of surface. 1 lb., 25c; 5 lbs., 75c; 25 lbs., \$2.00.

BLOOD MEAL. A quickly available, yet long lasting organic fertilizer. 5 lbs., 85c; 10 lbs., \$1.50; 25 lbs., \$3.00.

BONE MEAL

BONE MEAL. The fertilizer for all purposes; safe and effective. Especially good for use in the rose garden, on lawns and on flowering shrubs.

34-oz. pkg.	\$0.25	25 lbs.	\$2.75
5 lbs. ....	.60	50 lbs.	3.50
10 lbs.	1.00	100 lbs.	5.50

HYDRATED LIME

Approved by agricultural authorities for gardening. Fast in action. Also used for mixing with spray materials. 46-oz. pkg., 20c; 5-lb. bag, 30c.

PLANTABBS. A fertilizer and stimulant in tablet form made especially for potted plants. Now contains Vitamin B-1. Package of 30 tablets, 25c; 75 tablets, 50c; 200 tablets, \$1.00; 1000 tablets, \$3.50.

HY-GRO

(13-26-13)

A highly soluble plant food containing 13% Nitrogen, 26% Phosphoric Acid and 13% Potash, to which growth hormones and other plant nutrients are added. 3-oz. bottle, 25c; 20-oz. bottle, \$1.00; 10-lb. drum, \$4.00.

TOBACCO DUST. See page 57.

TOBACCO STEMS. Used for fumigating plants to kill insects, and as a mulch for roses, asters, lettuce, etc. Bale of about 100 lbs., \$2.25.

TERRA-LITE Brand VERMICULITE

Plant Aid

Amazing New Growing Medium

Terra-Lite is a brand of Vermiculite especially developed for horticulture. Used for seed germination, rooting cuttings, soil lightening, drainage and bulb or tuber storage. 4-qt. bag, 35c; ½-bu. bag, 75c; 2-bu. bag, \$1.65.

PULVERIZED LIMESTONE. A Lawn and Garden Conditioner. For renewing old lawns, use at the rate of 100 pounds for each 400 square feet. For new lawns, give a generous coating at the rate of 1000 to 2000 pounds per acre for sandy soils, and 2000 to 3000 pounds per acre for clay soils. Per bag of 80 lbs., \$1.10; 5 bags, \$4.50; 10 bags, \$8.00.

PHOSPHATE, SUPERPHOSPHATE (18% Acid Phosphate). The rapid development of plants with a corresponding stimulation of flower production are qualities that may be attributed to phosphates. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.75; per bag of 100 lbs., \$3.25.

FINE HORTICULTURAL PEAT MOSS

The best known and mostly widely used product for conditioning soil and for mulching. Except for old-fashioned barnyard manure, no other product so nearly fills the need for organic matter in soil. The addition of substantial quantities to the garden will add to the soil's ability to hold moisture; will aerate the ground and will improve the texture of clay soils. A full bale will cover 250 square feet approximately 1 inch deep. Not prepaid except locally (terms on page 64). 18-oz. pkg., 20c; 1½-bu. carton, \$1.45; full bale, \$5.75.



WEEDONE (2-4-D). Sprayed on the leaves, Weedone kills the following weeds right down to the root tips: poison ivy, oak or sumac, honeysuckle, bindweed (morning glory), plantain, dandelion, etc. 6 ozs. (makes 3 gals.). 75c; 1 qt. (makes 15 gals.), \$2.50; 1 gal. (makes 60 gals.), \$7.50. Quotations on larger quantities made on request.

WEED KILLERS



DUPONT'S 2, 4-D WEED KILLER. Powder form for weed control in fields, pastures and lawns. 1 lb. makes 100 gallons. 1-lb. bottle, \$2.35; 4-lb. bottle, \$8.40; 25-lb. drum, \$42.00.

DUPONT'S KARMEX. A 2, 4-D weed killer in tablet form. 25 tablet bottle, 98c; 100 tablet bottle, \$3.40.

EndoWeed

Sprays ugly weeds away! A selective weed killer for lawns. Will not harm the grass. ½-pt. can, \$1.00; qt., \$2.75; gal., \$8.50. Small packet (powder) (makes 1 quart of mixture, enough to spread 50 ft.) (5x10), 25c.

BARWEED. A liquid 2, 4-D weed killer. 8-oz. bottle, \$1.00.

TUFOR. A concentrated 2, 4-D selective weed killer. Four ounces treat 3,250 sq. ft. of lawn to control dandelions, plantain and other unsightly weeds. Also controls poison ivy, honeysuckle and many other noxious weeds. Retail price: 4-oz. bottle, \$1.00; 1-pt. bottle, \$2.00; 1-qt. bottle, \$3.50.

WEED KILLER. See Acme Weed Killer, page 56.

WEED KILLER (Hammond's). Weeds, poison ivy, and all vegetation are easily destroyed with this highly concentrated easy-to-use material. Dilute with 40 parts of water. Apply with sprinkling can. 1 qt., 70c; 1 gal., \$2.00; 5 gals., \$8.00.

WEED-NO-MORE. Kill weeds in lawns. 8-oz. bottle (covers 1400 sq. ft.), \$1.00. Quart (treats 6400 sq. ft.), \$2.98.

SODIUM ARSENITE. For the control of crab grass and other weeds. 1 gal., \$2.50.

ZOTOX CRAB GRASS KILLER. Will also control chickweed. 8 ozs., \$1.00; 16 ozs., \$1.50; 32 ozs., \$2.50; 5 lbs., \$4.50. 16-oz. bottle treats up to 2000 sq. ft.

WEEDDUST

TRADE MARK



A 2, 4-D in powder form, ready to use, very simple to apply. Merely dust on weeds, no spraying. 12-oz. sifter top can, 75c.

WEEDAR

A 2, 4-D liquid to kill weeds in lawns. 6-oz. bottle, 59c; 1 qt., \$1.69; 1 gal., \$5.95.

"AMMATE" WEED KILLER. Effective for control of poison ivy, ragweed, Canada thistle, dandelion, plantain and many other weeds. Use ½ to 1 lb. to a gallon water, 1 gallon solution to 100 square feet of infested area. 2-lb. jar, 85c; 6-lb. bottle, \$2.25; 50-lb. drum, \$12.00; 350-lb. barrel, \$63.00.



TAT C-LECT. A selective crab grass killer, kills young seedlings, mature plants. Retards germination, safe on common lawn grass. 8-oz. bottle makes 4 gallons, sufficient for 400 sq. ft. 8-oz. bottle, 85c; 16-oz. bottle, \$1.50.

ACME

SPRAYS INSECTICIDES DUSTS

ACME APHIS SPRAY. An all-around contact insecticide for the control of aphids, thrips, leaf hopper, and many other sucking and leaf-eating insects. 3-oz. tubes, 40c each.

ACME BAIT-M. Controls cutworms, sow bugs, grasshoppers, slugs and snails. 1-lb. carton, 35c; 2½-lb. carton, 75c.

ACME EMO-NIK. A complete contact insect spray combining nicotine with Emo, the summer oil emulsion. 4½ ozs., 37c; pt., 70c; qt., \$1.00; gal., \$2.75.

ACME KOPPER SHIELD PRUNING PAINT. A prepared liquid paint containing copper for treating wounds left by pruning, storms, or accidents. Prevents canker fungus, hard rot, and certain other fungi. Forms a protective shield. Pt., 65c; qt., \$1.20; gal., \$3.75.

ACME TOMATO DUST. A control for blight and pests on Tomatoes.
1-lb. sifter-top pkg. \$0.50
Pump-gun containing 1 lb. dust .. .65
4-lb. bag 1.05

ACME SPRAY SOAP. A refined fish oil soap. Less liable to give injury to foliage than ordinary soap. Lb., 45c; 7½ lbs., \$2.60.

AMMATE WEED KILLER. See page 55.
ANTROL ANT TRAPS. Kill both sweet and grease eating ants. Each, 15c; 6 for 80c.

ANTROL READY FILLED SETS. Consisting of four patented glass "feeders" filled with regular Antrol syrup. Per set, 40c.

ARSENATE OF LEAD. The standard insecticide for the control of chewing insects. 1-lb. carton, 50c; 1-lb. bag, 45c; 4 lbs., \$1.30.

BLACK LEAF 40. A concentrated nicotine solution for aphids, thrips and red spider. Oz., 36c; 5 ozs., \$1.05; lb., \$2.42; 2 lbs., \$3.92; 5 lbs., \$7.40; 10 lbs., \$12.85.

BORDEAUX MIXTURE. The recognized preventive for most fungous diseases. 1-lb. carton, 40c; 4 lbs., 95c.

CALCIUM ARSENATE. A strong inexpensive insecticide for use on hardy foliage, such as potato vines, etc. 1-lb. carton, 35c; 4-lb. bag, 60c.

CARTRIDGE FOR ARNOLD SPRAY GUN. DDT., Rot-O-Spray (Rotenone), Funguspray, Arsen-O-Spray, Sulph-O-Spray, Cryolitespray, Weed-O-Spray 2, 4-D). 35c each; 3 for \$1.00.

CHAPERONE. (Liquid.) Spray hedges, garbage cans, etc., if you want to keep dogs and cats away. 4 ozs., 50c; 12 ozs., \$1.00.

CORN EAR WORM DROPS. A treatment for control of corn ear worms, a blend of organic and inorganic germs. Bottle contains applicator, from which 4 to 10 drops, depending on size of ear, are to be inserted in the tip of the ear. Treatment should be made after corn silk has turned brown, a sign of complete pollination. 2-oz. bottle, 35c.

CROW REPELLENT. Seed-preserver for corn. ½-pt. can, enough for one bushel seed, 60c; 1-pt. can, enough for two bushels, \$1.00; 1-qt. can, enough for four bushels, \$1.75.

CRYOLITE. 2-lb. bag, 65c.

CYANOGENAS. "Calcium Cyanide." Grade A, for the destruction of ground moles, woodchucks, rats, and other rodents. 1-lb. can, 98c; 5-lb. can, \$3.75; 25-lb. can, \$12.50; 100-lb. drum, \$30.00.

CYANOGENAS "Grade G" for greenhouse fumigation. 5-lb. can, \$3.75; 25-lb. pail, \$12.50; 100-lb. drum, \$30.00.

ACME KOPPER KING. A Scientific Bordeaux Spray. Kopper King is a basic copper sulphate, a fungicide of revolutionary importance. It is neutral and insoluble, requiring no lime to keep it from burning. Kopper King contains 52% copper, twice as much as ordinary copper sulphate (common blue-stone). Can be used either as a liquid spray or combined with a carrier in making a home-made dust. Favored for use on tomatoes to avoid Bordeaux (lime) injury. Also for prevention of late blight on potatoes following the use of Red River Potato Mix for insect control. 1-lb. carton, 50c; 4-lb. bag, \$1.35.

ACME KOPPER QUEEN. A liquid copper spray for the control of mildew. 8-oz. can, 35c; pt., 60c; qt., 95c.

ROSE SPRAY. Goodbye guesswork! Grow beautiful Roses and other flowers with the Acme System of Spray Treatment combining 3 necessary elements (packed separately) to solve the entire spraying problem—NO other sprays needed. Ask for ACME SCIENTIFIC ROSE SPRAY.

The number indicates number of gallons of spray each set will make.

No. 3	.....\$0.95	No. 48	.....\$6.00
No. 6	..... 1.50	No. 96	..... 9.75
No. 24	..... 4.00		

CYANOGENAS KILLS ANTS. 4 ozs., 39c.

DOGZOFF. Efficient animal repellent. Garden size bottle, 50c.

PRATT'S DDT (25% DDT). A liquid DDT spray in glyceride oil base. For use in spraying fruits, vegetables, flowers, barns, dairies and outbuildings. 1½-oz. bottle, 35c; 8-oz. bottle, \$1.00; 1-qt. can, \$2.85; 1 gal., \$8.50.

DITHANE D-14. Controls both early and late blight on tomatoes and potatoes. Recommended spray: 2 qts. Dithane D-14, 1 lb. zinc sulphate, ½ lb. lime, water to make 100 gallons. 5-gal. can, \$12.00.

D-K. A penetrating spray containing Rotenone, Pyrethrum and DDT. Controls both sucking and chewing insects.
1½-oz. bottle\$0.40
½-pt. bottle 1.50
1 qt. 4.75
1 gal. 12.75

ENDO PEST. All the protection your garden needs. Controls most chewing insects, sucking insects, and fungous diseases.

10-oz. Applicator Gun (complete) \$0.79
10-oz. Refill Cartridge for Gun .. .59
2-lb. Pouring Spout Pkg. 1.50
4-oz. Sifter Top Pkg.25

EVERGREEN. Kills garden insects. No spreader required. 1 oz., 35c; 6 ozs., \$1.15; 1 pt., \$2.45; 1 qt., \$4.10.

FORCE'S MOLE KILLER. No traps—no gas—no harm to domestic animals or birds. True mole food scent attracts and kills moles. Pellet form. 35 pellets. 25c; 75 pellets, 50c; large size (185 pellets), \$1.00.

FERMATE. See page 58.

FORMACIDE. A formaldehyde dust used to control damping off. ½ lb., 50c; 1 lb., 85c; 5 lbs., \$2.50.

FRUITONE. Makes seedless Tomatoes. Stops premature drop of flowers, fruits and leaves. 2½ oz., 25c; 2-oz. can, \$1.00; 12-oz. can, \$5.00.

FUME-GEN. A scientific dog and ant repellent and insecticide. Pkg., 50c.

ACME ROTENONE GARDEN GUARD. Non-injurious to humans and warm-blooded animals. It gives immediate control over a wide range of insects. A light dusting will bring immediate results. 1-lb. sifter-top pkg., 50c; 1-lb. pump-gun pkg., 65c; 4-lb. bag, \$1.25.

ACME RED RIVER POTATO MIX. (Containing DDT.) Yes. DDT has been added to Red River Potato Mix, increasing effectiveness against leaf hopper and psyllid, thereby greatly increasing a remarkable harvest. Red River Potato Mix will also kill potato bugs as well as stimulating the foliage. Use as a dust or spray. 1 lb., 55c; 4 lbs., \$1.75.

ACME STOP. Tree banding compound painted around the trunks to keep caterpillars, etc., from crawling into the trees. 6 ozs., 50c; lb., 87c; 7½ lbs., \$5.00.

ACME WETTABLE DUSTING SULPHUR. An improved dusting sulphur which can also be used as a liquid spray; controls mildew and black spot. 2-lb. sifter-top pkg., 42c.

ACME WEED KILLER. A powerful quick-acting arsenical weed killer for destroying weeds and all plant life on driveways, tennis courts, paths, etc.; also used on roadbeds of railroads. Pt., 50c; qt., 65c; gal., \$1.75; 5 gals., \$7.20.

FUNGITROGEN. A most effective control for mildew, black spot, and other fungous diseases of roses. Will not discolor the foliage. 4 ozs., 45c; half pint, 75c; 1 pt., \$1.25; qt., \$2.00; gal., \$6.00.

GRAFTING WAX. ¼ lb., 30c; ½ lb., 45c; 1 lb., 70c.

GRASSELLI SPREADER. A combined spreading, sticking and wetting agent. Pt., 75c; gal., \$4.95.

HAMMOND'S TOMATO DUST. Controls insects and blight. 1-lb. sifter top can, 45c; 5-lb. bag, \$1.25.

HORICUM. A liquid lime and sulphur. 1 qt., 50c; gal., \$1.20; 5 gals., \$4.40.

IRON SULPHATE. 5 lbs., 45c; 10 lbs., 80c; 25 lbs., \$1.45; 50 lbs., \$2.25; 100 lbs., \$3.75.

LIME AND SULPHUR (Dry). For use in dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, blotch, red spider and mite. 1 lb., 37c; 5-lb. tin, \$1.55; 12½-lb. bag, \$1.75.

LIME AND SULPHUR. (Liquid.) See Horicum.

LOBO. A contact insecticide for gladiolus thrips, carnations, chrysanthemums, etc. Pt., \$2.00; gal., \$10.50.

MOLITE RODENT KILLER. Kills moles, rats, gophers. New improved gas type destroyer. Use one for every 12 feet in runway. 15c each; per doz., \$1.50.

MOLOGEN. Eliminates moles from your lawn. Non-poisonous. ½ lb., 50c; 1½ lbs., \$1.25.

MOLE NOTS. A specially prepared mole food. In prepared bait form. Pkg., 35c; large size, \$1.00.

MOUSE NOTS. For house or garden. Impregnated prepared bait. No mixing; no traps. Pkg., 25c; large size, \$1.00.

NAPHTHALENE FLAKES. Useful in controlling gladiolus thrips, cyclamen thrips, together with certain soil insects, moles, etc. Lb., 30c; 5 lbs., \$1.25; 25 lbs., \$5.75.

NITRAGIN GARDEN INOCULATION. For garden peas and beans, sweet peas, lupins. Pkt., 10c. Will inoculate up to 6 pounds of seed.

INSECTICIDES, FUNGICIDES, SPRAYS AND DUSTS—Continued

N. N. O. R. A rotenone in liquid form. 1 oz., 35c; 6 ozs., \$1.00 each; 16 ozs., \$2.15 each; 1 gal., \$13.50 each.

PARA-DICHLOROBENZENE. For killing the peach tree borer. 1 ounce will treat a full grown tree. ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

PARA-SCALECIDE. For treating peach borer via the dipper method, Scalecide plus 15% paradichlorobenzene. 1 qt., \$1.00; gal., \$2.50; 5 gals., \$8.25.

PARIS GREEN. ¼ lb., 25c; 1 lb., 65c; 5 lbs., \$3.00.

PHYGON. (Wettable.) A fungicide for the control of all leaf blights and fruit rot of tomatoes, black spot of Roses, apple scab and many other plant diseases caused by fungi. A seed protectant to be dusted on beets, tomatoes, spinach, Swiss chard, peppers and other seeds, before planting to prevent seed decay and "damping-off." 2-oz. cans, 50c; 4½-oz. container, \$1.00.

PHYGON ROSE DUST. A dust containing PHYGON, an outstanding fungicide for black spot and mildew control; also DDT for insect control. 1-lb. container, 75c; 5-lb. bag, \$3.00.

POMO-GREEN WITH NICOTINE. The leaf-green all-in-one dust or spray. A combination material, which controls fungous diseases, and kills both leaf-eating insects and aphids. Leaf-green in color and never unsightly on plants. May be used for dusting or spraying. 1 lb., 95c; 5 lbs., \$3.50.

POTATO MIX. See Acme Red River Potato Mix, page 56.

PRATT'S GARDEN AND ROSE DUST. Contains pyrethrum, piperonyl cyclohexenone, rotenone, sulphur and copper. All-purpose garden dust. Controls sucking and chewing insects and fungus diseases on flowers and vegetables. 1-lb. Handy Dust Gun, \$1.25; 2-lb. bag, \$1.35.

RABBIT REPELLENT (G. & O.) 5-lb. bag will treat 100 to 150 individual plants or 200 to 250 running feet of plant row (one side.) Full directions for use on package. 1 lb., 45c; 5 lbs., \$1.75.

RAT NOTS. Non-poisonous. In prepared bait form—no mixing. Pkg., 25c; large size, \$1.00.

RAT-NOT PASTE. Recommended for elusive rats which are difficult to trap, and are finicky in their eating habits due to easy access to garbage, feed and food warehouses. Ideal, too, for control of chipmunks, etc. Packaged in handy, convenient tubes. 35c and \$1.00.

RAT BAIT, TOPZOL. Ready for instant use. Non-poisonous. Pkg., 15c.

RAT AND MOUSE SYRUP, TOPZOL. A non-poisonous exterminator. 1-oz. bottle, 25c.

RAT KILLER, TERRO. A non-poisonous economical powder used in making your own baits. Mixed with ground raw beef, sausage, etc. 2-oz. can, 50c.

RAT AND MOUSE EXTERMINATOR, COWLEY'S. (Liquid Poison). Not mailable. 6-oz. bottle, 50c.

RED ARROW. A contact insecticide that may be used upon tender foliage and flowers without burning or staining. Economical to use, being decidedly effective at dilutions of one to five hundred. Oz., 35c; 4 ozs., \$1.00; pt., \$2.85.

ROOTONE. A hormone powder for rooting cuttings, dusting seeds and soil. ¼-oz. pkg., 25c; 2-oz. jar, contents will treat up to 3,000 cuttings, price \$1.00; 1 lb., \$5.00. Ask for circular.

SNAROL. An effective bait for controlling cutworms, grasshoppers, snails, slugs and sow bugs. Not injurious to plants. 1 lb., 25c; 2½ lbs., 50c; 6 lbs., \$1.00.

SULFOCIDE. A non-poisonous sulphur fungicide for fruits, vegetables and flowers. Pt., 75c; qt., \$1.25; gal., \$2.75.

PESTROY 25% DDT. Concentrate 1 gallon plus 4 gallons of water makes 5 gallons of full 5% strength DDT. Ready to use. Quart, \$1.19; gal., \$3.49; 5 gals., \$15.95.

Rotenone

SHAWNEE ROTENONE. A Rotenone Dust fortified with Lethane 60. Advantages of Lethane 60 in Rotenone Dusts: 1—The combination dusts are more stable than Rotenone alone. Carry-over dusts are not subject to deterioration before next season. This represents marked savings. 2—The advantage of Lethane 60 added to Rotenone Dust is available without increasing control costs. 3—The Rotenone Dust with Lethane 60 added remains effective on the plant longer than Rotenone alone. 2-lb. bag, 55c; 4-lb. bag, 75c; 25 lbs., \$4.25.

ACME ROTENONE GARDEN GUARD. Controls many sucking and chewing insects. Non-injurious to humans and warm-blooded animals. A light dusting will bring immediate results. 1-lb. sifter-top package, 50c; 1-lb. pump-gun package, 65c; 4-lb. bag, \$1.25.

HAMMOND'S STABILIZED ROTENONE DUST. 1-lb. sifter-top carton, 50c; 5-lb. bag, \$2.00; 25-lb. bag, \$5.00.

MCCORMICK'S ROTENONE DUST. Used as a dust or wet spray. 1 lb. makes 10 gallons of spray. 2-lb. bag, 75c; 5 lbs., \$1.60.

ROTECIDE. A liquid rotenone garden spray. 1 oz., 35c; 8 ozs., \$1.00; pt., \$1.75; qt., \$3.00; gal., \$8.00.

SULFORON. Micro-fine, wettable sulphur. 6-lb. bag, 75c.

SULPHUR, Powdered. For mildew. See Acme Wettable Sulphur, page 56, also Sulforon.

SCALECIDE. A complete dormant spray for San Jose scale, and other orchard pests. Qt., 85c; gal., \$2.00; 5 gals., \$7.35. Larger size available—ask for prices.

SELOCIDE. Kills red spider. 1 gal., \$3.50.

SLUG SHOT. One of the best known remedies for cabbage and currant worms as well as other leaf-eating insects. Harmless to humans. Lb., 40c; 5 lbs., \$1.70.

BOURBON ROTENONE. Used as a dust or spray. 1 lb. to 5 gallons. 1-lb. bag, 30c; 2-lb. bag, 55c; 5-lb. bag, \$1.25.

SABADILLA DUST. On many insects, such as sucking plant bugs, Sabadilla Dust is superior to pyrethrum or rotenone. Tests have shown that the residual action of Sabadilla Dust outlasts that of pyrethrum in many cases. It is recommended for the control of Harlequin cabbage bugs and worms (collard bug), squash bugs, chinch bugs, blister beetle, and leafhoppers on potatoes, beans and peanuts. Direct dust so as to come in contact with the insects. 2-lb. bag, 75c.

SPERGON. A seed protectant in powder form to be applied to seed before planting to prevent seed decay and "damping-off," particularly in cold, wet weather. Recommended for peas, beans, lima beans, corn and other seeds. It is easy to apply to the seed and non-injurious to the user. 1-oz. envelope, 25c; 5-oz. container, \$1.00.

SPERGON. (Wettable.) A fungicide for the control of downy mildew on cabbage, cantaloupe and cucumbers. A dip for sweet potato seed and sprouts, and for Croft Lily bulbs; also for the control of brown patch and dollar spot in turf. 4-oz. container, 50c.

SPERGON GLADIOLUS DUST. A dust containing Spergon and DDT to be applied to corms before planting to help control rot and thrips, may also be used on Tulips, Narcissus and Iris. 1-oz. envelope, 25c.

TAT FORMULA "83". (Contains Antu.) Kills rats. So powerful one lick kills. Ready to use. Contains 2 baits. Drinking—feeding.

No. 1 size, 35c.

No. 2 Farm size. Contains 4 ounces of feeding bait and also a package of concentrate powder. \$1.00.

No. 3. A shaker top can of the concentrate powder. 1¾ ozs., \$1.00.

TREE KOTE. A tree wound dressing and pruning compound. 1 pt., 40c; qt., 60c; gal., \$1.75.

TERRO ANT KILLER. Small bottle, 25c; 3 ozs., 50c.

TERRO ROACH KILLER. Kills roaches and water bugs. 4-oz. shaker-top can, 35c.

TOBACCO DUST (Gold Leaf). Not less than 1.0% nicotine. 2 lbs., 25c; 10 lbs., \$1.00; 100 lbs., \$5.50.

TRANSPLANTONE. For the treatment of plants when transplanting. Contains the root-forming hormones, vitamin B-1, and other members of the vitamin B complex important in plant growth. ½ oz., 25c; 3-oz. can, \$1.00; 1-lb. can, \$4.00.

SPRAY YOUR ROSES WITH

TRI- O GEN

Patents Pending

Rose Garden Spray Treatment—it protects roses against many insects and diseases—it tends to promote healthy plant growth

Contains Fermate.

5 sizes: 90c, \$1.50, \$4.00, \$6.00 and \$20.00.

TRI- O GEN DUST. Contains Fermate. Combination insecticide and fungicide for those who prefer dusting Roses as well as other horticultural plants. Controls eating insects, sucking insects, mildew, black spot, etc. Same results accomplished as with spray form of Tri-Ogen. 1 lb., 85c; 5 lbs., \$3.00.

TREE WOUND PAINT. Prevents decay after pruning. This penetrating, anti-septic paint is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. ½ pt., 50c; 1 pt., 90c; 1-qt. can, \$1.75; 1-gal. can, \$4.50.

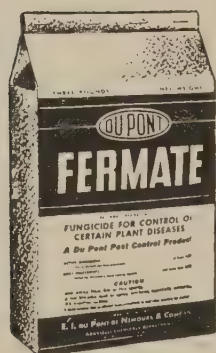
VOLCK, NURSERY. Effectually controls aphids, mealy bug, white fly, thrips, etc., while for red spider and scale insects upon evergreens it is unequalled. Does not discolor foliage. 4 ozs., 30c; 1 pt., 60c; gal., \$2.50; 5 gals., \$8.50.



SPRAY MATERIALS

WEED CONTROLS

SEED AND SOIL DISINFECTANTS



FERMATE. The new organic fungicide to control various diseases on **Fruits, Vegetables, Flowers** and used extensively last year for the control of **Tobacco Blue Mold**. Circulars with complete information on request. 3-lb. bag, \$2.55.

DUPONT'S GARDEN DUST.

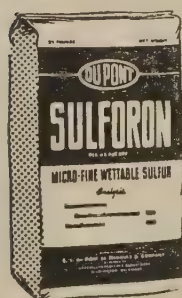
Kills bugs! Controls disease! Does both at once. A complete insecticide and fungicide for vegetables, flowers and fruit trees. Contains 5% DDT plus Rotenone to control insects, and Fermate and Zerlate to control diseases. Circular on request.

8-oz. Dust Gun \$0.79
1-lb. Sifter Top Can ... 1.15
4-lb. Canister 3.50

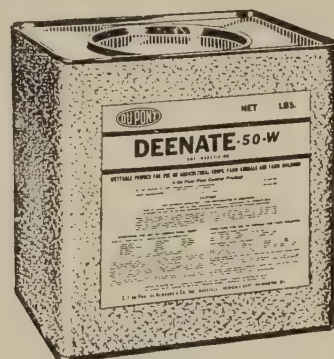


DUPONT ROSE DUST. A control for black spot, powdery mildew, rust and other foliage diseases of Roses. Contains sulphur and Fermate. Can be used as a spray or dust. Circular on request.

8-oz. Dust Gun \$0.64
1 lb. 1.00
4 lbs. 3.00



SULFORON. A micro-fine wettable sulphur. 6-lb. bag, 75c.



DEENATE 50W. (50% DDT.) A wettable powder for use on agricultural crops, farm animals and farm buildings. Circular on request. 1-lb. canister, \$1.00; 4-lb. bag, \$2.75.

DEENATE 10X. (10% DDT.) Dusting powder for use on farm animals and in farm buildings. 1-lb. sifter top can, 45c.

DUPONT'S 10% DDT INSECT DUST.

Controls flies, mosquitoes, gnats, ants, bedbugs, cockroaches, fleas, carpet beetles, silverfish and ticks.
1-oz. Puffer Can \$0.23
8-oz. Dust Gun93
1-lb. Sifter Top Can ... 1.15



DUPONT'S 5% DDT INSECT SPRAY.

Same as the dust only in liquid form.
1-pt. bottle \$0.45
1-qt. bottle75
1-gal. bottle 2.50

Tomato Blight

To prevent late blight on Tomatoes, spray every ten days with:

FERMATE. See above.

ACME TOMATO DUST. See page 56.

ACME KOPPER KING. See page 56.

BORDEAUX. See page 56.



D-D* Soil Fumigant

When applied to the soil before planting, D-D vaporizes and kills nematodes, wireworms, mole crickets and other root destroying pests. No applicator needed for small areas.

*Reg. TM-U.S. Pat. Off.

Pint \$1.00 Quart \$1.75 Gallon \$5.85

SEED and SOIL DISINFECTANTS

NEW IMPROVED CERESAN

For Seed Grains

Effective in controlling seed-borne diseases of grains, sorghums, millets, and flax. 1 lb. treats 32 bushels. Full directions furnished. 4 ozs., 30c; 1 lb., 80c; 4 lbs., \$2.70; 8 lbs., \$5.40; 25 lbs., \$15.00; 100 lbs., \$55.00.

SEMESAN

For Flower and Vegetable Seeds

Used in dust or liquid form for vegetables, flower seeds, or bulbs. One pound treats 15 pounds. Full directions furnished. 1/3-oz. pkt., 10c; 2 ozs., 40c; 12 ozs., \$1.88; 4 lbs., \$9.10; 25 lbs., \$52.50; 100 lbs., \$198.00.

SEMESAN BEL

For Seed Potatoes

A disinfectant for better control of seed-borne rhizoctonia and scab. One pound treats 60 to 80 bushels. Full directions furnished. 2 ozs., 30c; 1 lb., \$1.65; 4 lbs., \$5.70; 25 lbs., \$33.25; 100 lbs., \$125.00.

NEW IMPROVED SEMESAN, JR.

For Field and Sweet Corn Seed

Controls ear, root, and stalk rots of both types. 1 1/2 ounces treat 1 lb. shelled corn. 1 1/2-oz. pkt., 15c; 12 ozs., 56c; 6 1/4 lbs., \$3.75; 25 lbs., \$12.50; 100 lbs., \$45.00.

ARASAN. For corn, peanuts and vegetables. 1 oz., 16c; 8 ozs., 80c; 4 lbs., \$5.16; 25 lbs., \$30.00; 100 lbs., \$115.00.

SPECIAL SEMESAN. For large brown patch and "dollar spot." 1 lb. treats 6000 sq. ft. 5 ozs., 63c; 6 lbs., \$9.35; 25 lbs., \$36.00; 100 lbs., \$135.00.

TERSAN. The new organic fungicide for brown patch control. 8 ozs., 80c; 4 lbs., \$5.16; 25 lbs., \$30.00; 100 lbs., \$115.00.

Barsprout

Reduces shrinkage while in storage. 1 lb. Barsprout treats 11 bushels of potatoes. 12-oz. sifter top canister, \$1.00; 5-lb. can, \$5.50; 20-lb. drum, \$16.00.

TAT MO-GO

Kills moles and gophers. A special bait that really works.
Trial size, 35c; 3 1/2 ozs., \$1.00; 1 lb., \$3.00.

ZINC SULPHATE

Used with insecticides and fungicides such as Arsenate of Lead, Dithane D-14 to correct spray injury. 1 lb., 20c; 5 lbs., 75c; 10 lbs., \$1.25.



Protect the Birds at All Times!

Provide Food, Shelter, and Houses for Nesting
It's Fun to Watch Them and Enjoy Their Song

McCullough's Wild Bird Seed



Choice Sunflower Seed

Plump meaty seeds that all birds love. Clean and fresh.

5 lbs.	\$1.65	25 lbs.	\$ 8.00
10 lbs.	3.25	100 lbs.	25.00

A mixture of sunflower, millet, peanut hearts, etc. All whole grains containing no cracked corn. Attracts all species of wild birds. 5 lbs., 85c; 10 lbs., \$1.55; 25 lbs., \$3.50; 50 lbs., \$6.75, prepaid within 300 miles.

BIRD FEEDERS

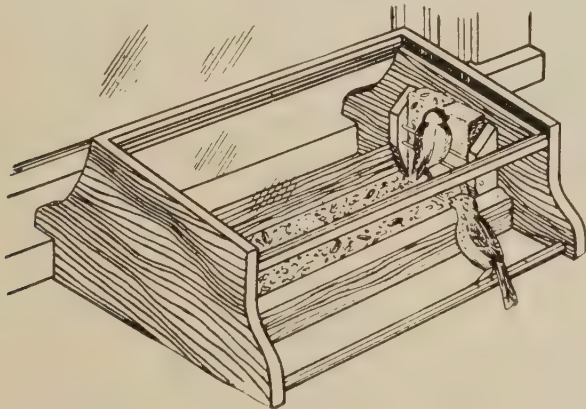
2-in-1 Hanging Bird Feeder

Bird Feeder in winter, wren house in summer. Made of wood, stained brown. Holds 1 lb. seed, 1 lb. suet. 11x11 in. A natural rustic seed feeder. It has proven one of the best. Price: \$2.25 each.



Bird Cafe

For many birds at your window. An all-weather feeder. Glass top keeps out rain and snow. Easily attached to window-sill from inside the room. With suet cake holder and seed hopper.



No. W16. Height 8 in., depth 16 in., length 16 in. Price: \$4.50 each.

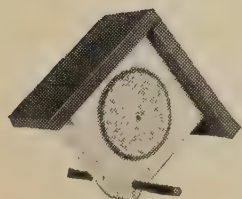
No. W25. Same as W16 except in size, being larger. Height 8 in., depth 16 in., length 24 in. Price: \$5.95 each.

Wild Bird Suet Cakes

BIRD SNACK. No. S. S. 1. Blend of pure beef suet, choice seeds, grain and berries. 35c each; 3 for \$1.00.

BIRD BANQUET. No. B. B. 2. Pressed peanut and suet cake. 35c each; 3 for \$1.00.

The Tree-O Wild Bird Feeder



No. 783. The most colorful and attractively designed set of wild bird feeders ever offered. The food offered consists of a mixture of seeds, fruits and berries—molded in pure beef fat. It makes a complete bird food during the winter months. To refill, simply remove the empty cartridge and press in a full one. Complete with suet, 35c each. Per box of 3, \$1.00. Refills, 3 for 35c.

Chickadee Diner

It's the ideal hang-anywhere feeder for beginners—a favorite aerial picnic ground for all birds. Complete with 12 paper-cupped Tidbits.

No. C.D.A. Chickadee Diner. \$1.25 each.

No. C.D.B. Same as C.D.A. but with 12 extra refill Tidbits. \$1.75 each.

No. C.D.C. Same as C.D.A. but with 24 extra refill Tidbits. \$2.25 each.

EXTRA REFILLS

See Chickadee Tidbits. Bottom of page.

Community Diner

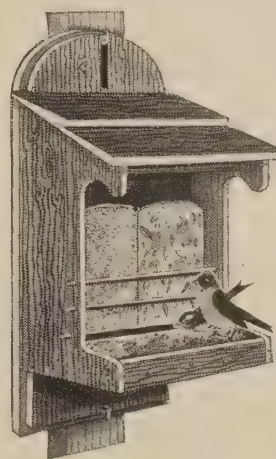
Same as Chickadee Diner but with perches.

No. C.D.D. \$1.50 each.

No. C.D.E. Same as C.D.D. but with 24 extra refill Tidbits. \$2.45 each.

EXTRA REFILLS

See Chickadee Tidbits. Bottom of page.



Bird Cafeteria No. C2

This Feeder makes a perfect gift. Comes filled with 2 cakes and a pound of special selected seed. Reservoir back of cakes keeps verandah filled. Width 7 in., depth 6 in., length 16 in. Price: \$4.25 each.

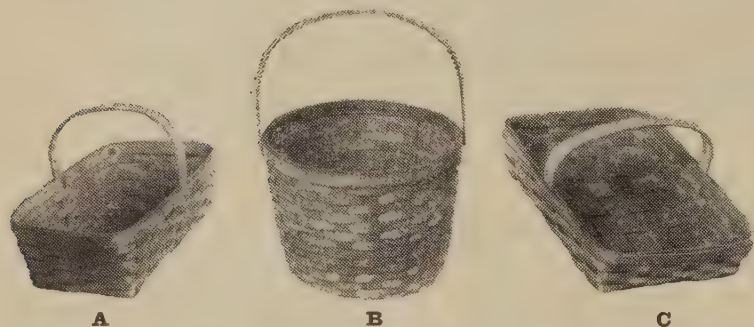
EXTRA REFILL CAKES
35c each; 3 for \$1.00.

Chickadee Tidbits

Ready to use refills for the popular Chickadee Diner and Community Diner. Box of 24 assorted seed-and-suet and pressed peanut-and-suet tidbits molded into paper cups.

No. C.T. 24. Box of 24 assorted. \$1.15 per box; 3 boxes, \$3.25; 6 boxes, \$6.00.

LAWN AND GARDEN EQUIPMENT



A

B

C

C. FLOWER AND FRUIT BASKET

Suitable for picking flowers, berries, vegetables, etc. Will hold 6 1-quart baskets.
No. 72-2. Size 20x13x4" deep. \$1.00.

BASKETS

A. OAK MARKET BASKET

No. 21-1. Size 18x10½ x6" deep. \$1.00.

No. 21-3. Size 22x13½ x7" deep. \$1.25.

B. OAK PICKING BASKET

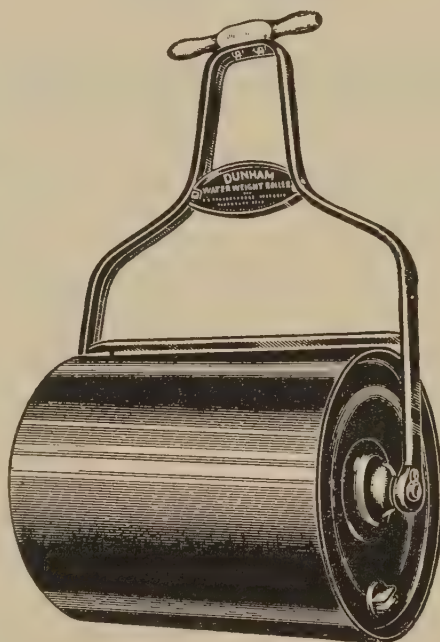
½ bushel size. \$1.00.

¾ bushel size. \$1.25.

Cemetery Vases

Flat bottom with detachable stem. Vase 4 inches in diameter at top, 2⅝" at bottom. 7 inches deep. Painted green. 20c each.

Dunham Water-Weight Lawn Rollers



The Dunham Water-Weight Roller can be made as heavy or as light as desired by simply putting in the right amount of water. For storing away or for moving, it can be emptied entirely and is light and easy to handle.

No.	Dia.	Length	Wt. Empty	Wt., Water Filled	Price
2.	14 in.	24 in.	55 lbs.	165 lbs.	\$14.70
4.	18 in.	24 in.	70 lbs.	230 lbs.	16.40
7.	24 in.	24 in.	100 lbs.	400 lbs.	25.00

The above rollers weigh 50% more when filled with sand—water is more convenient.



Milcor Pick-Up Cart

Metal body. Top opening 18x27 inches. Capacity 2¾ cu. ft. Wheels 11 inches in diameter. Tires 1½ inches wide and are of the puncture-proof semi-pneumatic type. The cart has a baked enamel finish. The body is green and the wheels, handle, etc., are orange. \$7.25 each.

Germaco

Hotkaps

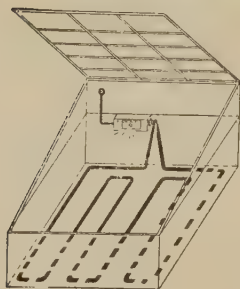
Help You Grow Earlier, Hardier Vegetables, Flowers.

Germaco **HOTKAPS**. Strong little hothouses, protect plants from destructive frost, storms, insects. University tests prove **HOTKAPS** increase yield 18% to 51%, nearly double early marketable yield, ripen crops 3 weeks earlier for highest prices. Quick, easy to set. 100 millions used. Premium profits pay for them many times over. Order today. 25 Hotkaps with Setter, 70c; 100 with Setter and Tamper, \$2.75; 250 Hotkaps with setter and tamper for \$4.65; 1000 for \$13.50. 5000 lots, \$13.35 per M. 10,000 lots \$13.20 per M. Steel Setter, \$1.95. Fibreboard Setter, 20c. Not ppd.



"GRO-QUICK" ELECTRIC SEED BED HEATER

Be a month ahead of neighboring gardens



For hotbeds, cold-frames and plant benches. Operates on household current. Has adjustable thermostat and pilot light. Will last for years.

JUNIOR GRO-QUICK (for 6x3 ft. bed). Has 40 ft. 200-watt cable. Prepaid, \$5.35.

SENIOR GRO-QUICK (for 6x6 ft. bed). Has 80 ft. 400-watt cable. Prepaid, \$6.95.

LABELS (Wooden)

TREE LABELS 100 1000
3½ inch, wired\$0.60 \$4.25

POT LABELS
4 inch55 3.75
5 inch60 4.15
6 inch65 4.75
8 inch90 7.00

GARDEN LABELS
8 inch 1.10 9.00
10 inch 1.50 11.00
12 inch 1.75 14.50

Eezy Wear Garden Gloves



Made of soft leather. Ideal for garden and similar uses.

Dirt-proof—Durable Washable

Three sizes: Ladies' size, 7 and 8; Men's size 9. Price, \$1.50 per pair; 2 pair for \$2.75.

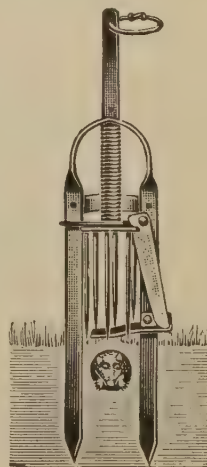
E-Z Trip Mole Trap

Simple and easy to set. Positive in design and action. \$1.80.



Victor Mole Trap

A spear type which harpoons the mole, causing instant death. Six prongs. 16¾ in. extreme length. \$1.50.



Wire Plant Props

These require no tying, as the loop at the top can be slipped around the plant stem. To determine the net height of each prop, deduct the following from the overall length: 4 inches from the 16-inch size, 6 inches from all othersizes. This represents the depth to which the stake should be pushed into the ground. It looks better if the shortest practical height is used. Prices: 16 in. overall, doz., 55c; 30 in. overall, doz., \$1.10; 42 in. overall, doz., \$1.35; 66 in. overall, doz., \$2.25; 78 in. overall, doz., \$3.30.



LAWN AND GARDEN EQUIPMENT

Pro-Tek

A greaseless cream which protects skin against paint, lacquer, grime, dirt and similar substances. Washes off easily when the job is done and takes the dirt with it. Simply work the cream into the hands and arms before commencing work. 8 ozs., 50c.

Plant Tubs

Made of Cedar, Painted Green

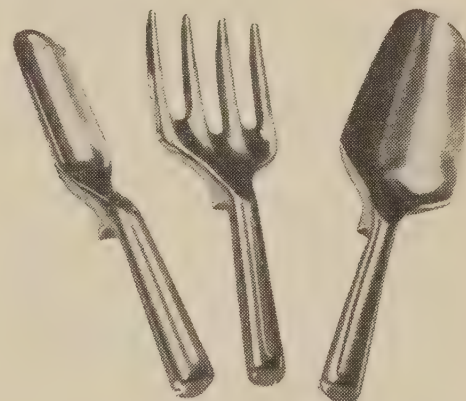
	Diameter Inside	Depth Inside	Each
No. 3.	8 in.	8 in.	\$1.25
No. 5.	10 in.	9 in.	1.75
No. 7.	12 in.	11 in.	2.50
No. 9.	14 in.	13 in.	3.00
No. 11.	16 in.	15 in.	4.00
No. 13.	18 in.	17 in.	5.00

Handles, 50c per pair extra.

Soil Soaker



No.	Length	Diameter	Each
No. 0	12 feet	2 inches (flat)	\$1.65
No. 1	18 feet	2 inches (flat)	2.20
No. 2	30 feet	2 inches (flat)	3.40
No. 3	50 feet	2 inches (flat)	5.50



"FEATHERLITE"

HAND GARDEN TOOL SET

A matched set of polished, non-rusting aluminum alloy! Strong, one-piece, lifetime construction. Each with patented finger rest that reduces fatigue. Three pieces; garden trowel, cultivating fork, and transplanting, bulb trowel. Beautifully gift boxed. \$3.95 per set.

Sold Separately Packed One in a Gift Box
Garden Trowel\$1.50
Cultivating Fork 1.50
Transplanting or Bulb Trowel 1.25

Planet Jr. Wheel Hoe and Cultivator



Planet Jr. No. 17. The most popular of all wheel hoes, light enough for a woman to handle, yet strong and sturdy enough for any job. The attachments—hoes, cultivator teeth, and plow—are all oil-hardened and tempered for better work and longer wear. \$10.85.

Not prepaid except in local delivery area, shipped elsewhere via express collect.



Vigoro Spreader

Will spread any kind of commercial or chemical fertilizer, as well as grass seed. Equipped with selective feed control.

Size 14 in., hopper capacity 15 lbs., \$5.15; 16 in., hopper capacity 35 lbs., \$9.20; 24 in., hopper capacity 65 lbs., \$16.95; 36 in., hopper capacity 100 lbs., \$24.25.

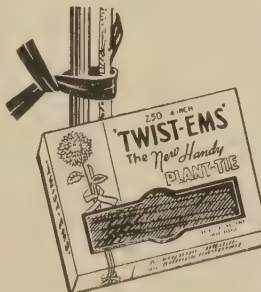
CYCLONE BROADCAST SEED SOWER

A general seeder, which has four pressed tin flanges and distributing wheel under the bottom; gearing wheel centered, making it easy to run. Has an accurate gauge. Sloping feed board and force-feed steel frame. One of the most widely used types. Sack holds one-half bushel; convenient hand hold and body shield; well braced. Price, \$3.25.

RAFFIA

For tying, basket making and fancy work. Natural color, 90c per lb.; 5 lbs., \$4.00.

GREEN. ¼ lb., 35c; Bundle (about 1 lb.), \$1.35.



"Twist-Ems"

THE NEW HANDY PLANT-TIE

Quick, permanent, attractive, convenient. Color, green. Box of 250, 4 in., 35c. Box of 125, 8-in. size, 35c. Box of 125, 16 in., 65c.



DSGT. Long handle trowel. Made of high quality steel. Price: \$1.65.



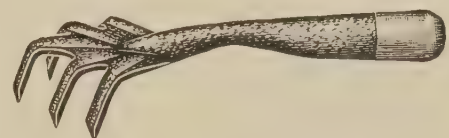
NT6. General purpose steel trowel. Price: \$1.10.



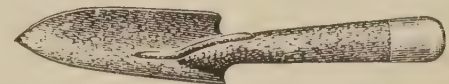
TT. Transplanting steel trowel. Narrow blade. Price: \$1.10.



800. Garden trowel 12½ inches long. Green enamel finish. 20c each.



802. Garden cultivator 11½ inches long. Green enamel finish. 20c each.



804. Transplanting trowel. A narrow trowel 11½ inches long. 20c each.

Planet Jr. Seeders

Are back again in limited supply. We welcome inquiries and will be glad to give information and prices.

STAKES, BAMBOO—PAINTED GREEN

Doz.	100	Doz.	100
1½ ft.	..20c \$1.35	3 ft.	....35c \$2.00
2 ft.	..25c 1.50	4 ft.	....40c 2.50
2½ ft.	..30c 1.75		

SUDBURY SOIL-TESTING KITS

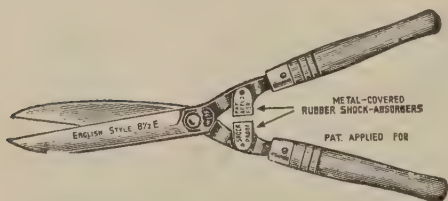
Tests for nitrogen, phosphorus, potash, and acidity. It will give the gardener complete information about the requirements of his soil.

Home Gardener's Kit (Four complete tests)	\$ 2.00
Club Kit (Makes 10 tests)	4.75
De Luxe Model	6.00
Horticultural Kit (Makes 60 tests) ..	9.75
Professional Kit (Makes 200 tests) ..	18.50

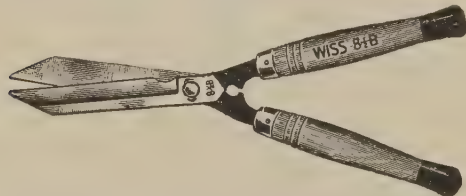
WATER-PROOF TREE WRAPPING PAPER

Rolls 4 inches wide, about 150 ft. Each, 75c; per doz., \$7.50.

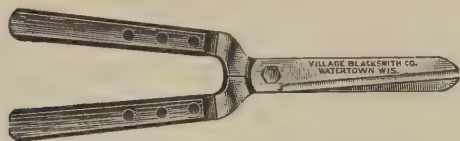
LAWN AND GARDEN EQUIPMENT

**8 1/2 E WISS HEDGE SHEAR**

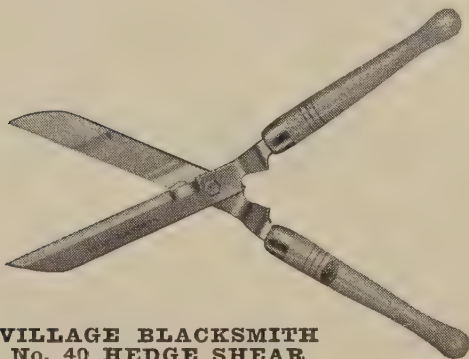
English pattern, fitted with an improved metal-covered rubber shock absorber. Reduces arm fatigue. 8 1/2 inch highly polished blade. **Price, \$5.00.**

**8 1/2 B WISS HEDGE SHEAR**

Solid steel with notch and cutter for heavy branches. Blade 8 1/2 inches. **Price, \$4.00.**

**VILLAGE BLACKSMITH ARISTOCRAT HEDGE SHEAR**

The lower blade is serrated to hold the branches in place while shearing. Blades fully polished. 8 inches. **Price, \$3.00.**

**VILLAGE BLACKSMITH No. 40 HEDGE SHEAR**

Specially designed notch makes pruning an easy job. Steel blades. 8 inches. **Price, \$2.25.**

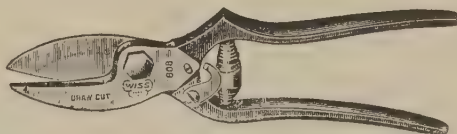
McGUIRE'S**No. 1**

McGUIRE'S BAMBOO LAWN RAKE
18 in. ... \$1.50
24 in. ... 2.00
30 in. ... 2.50

"METAL-GRIP" WHICH PLACES EVERY TOOTH ON THE GROUND WHEN HELD AT NORMAL ANGLE.

SPIRAL WHICH LINKS TEETH TOGETHER WITHOUT RESTRICTING FLEXIBILITY.

CONSTRUCTED IN U. S. A.



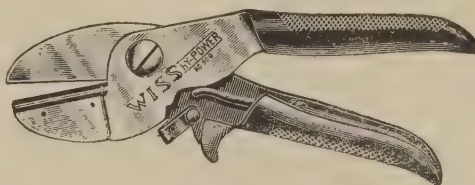
808

WISS DRAW CUT PRUNING SHEAR

A powerful light-weight professional pruning shear of drop forged cutlery steel. Length 8 in. **Price, \$4.25.**

**607G LADIES ROSE PRUNING SHEAR**

Light weight. Suitable for all light pruning. Green handles, polished blades. **Price, \$2.25.**



908

WISS HY-POWER PRUNING SHEAR

Effortless cutting action. Polished nickel finish. Length 8 in. **Price, \$2.75.**

**906B HY-POWER PRUNING SHEAR**

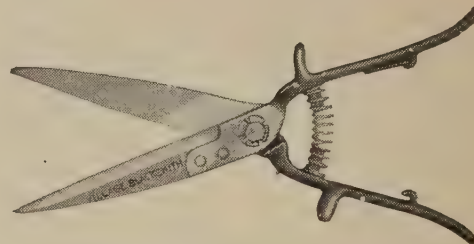
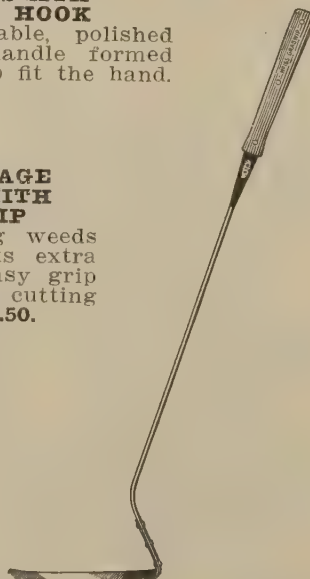
Rust resisting finish. Length 6 inches. **Price, \$2.25.**

**No. 3 VILLAGE BLACKSMITH GRASS HOOK**

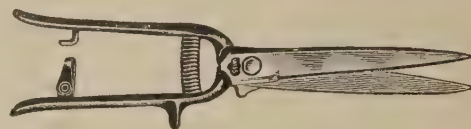
Tough, durable, polished hard wood handle formed and shaped to fit the hand. **Price, 95c.**

165 VILLAGE BLACKSMITH GRASWIP

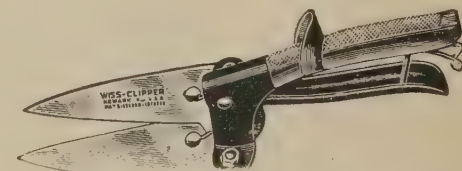
For cutting weeds and grass. Its extra length and easy grip handle make cutting easy. **Price, \$1.50.**

**No. 4 VILLIAGE BLACKSMITH GRASNIP**

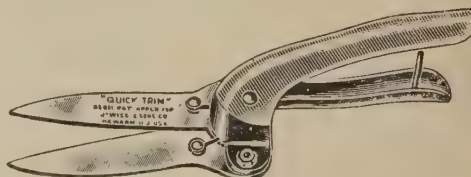
Price, \$1.25.

**5600 WISS GRASS SHEAR**

Length 12 inches. **Price, \$2.25.**

**700 WISS GRASS SHEAR**

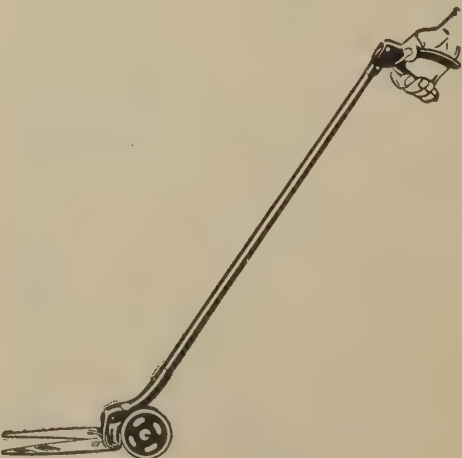
Price, \$1.90.

**801 WISS GRASS SHEAR**

Light weight. Narrow blade style. **Price, \$1.50.**

**DOO-KLIP SHEARS**

Keeps the hand clear off the ground. Operated by an easy up and down movement. Non-rusting. **Price, \$1.95.**



Long Handled Doo-Klip Grass Shear, \$3.50

SPRAYERS AND DUSTERS



The Arnold Garden Hose Insecticide Sprayer is a simple, practical and highly efficient mixing and spraying device which is attached to your garden hose in place of the regular nozzle.

Chrome Adjustable Nozzle\$5.50

Brass Adjustable Nozzle\$5.00

Used with Arnold Cartridges the two types of Arnold Sprayers provide a suitable spray for the control of fungus growths, plant diseases and both sucking and chewing insects.

For cartridges for the above sprayers, see page 56.



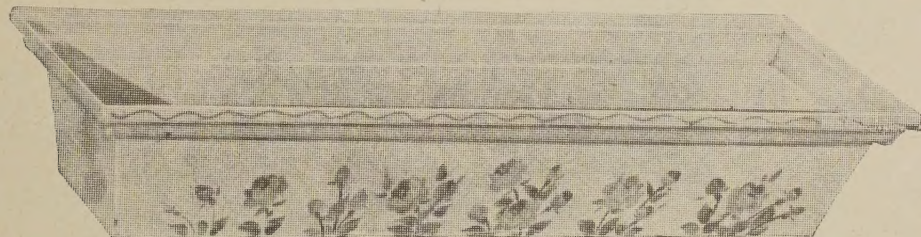
HAYES-ETTE SPRAYER

A small compact, efficient sprayer. Weighs just a little over a pound, filled. Simply attach to a garden hose. Capacity, 1½ gals. Sprays all modern liquid spray materials free from soap. Price, \$3.45.



HAYES JR. SPRAY GUN

Sprays liquids and most wettable powders up, down, sideways. Light, easy to use. Attach to garden hose. Capacity, 3 gallons. Price, \$6.95.



WINDOW FLOWER BOX

Made of tin, painted green and decorated on one side with hand-painted flowers.

Size 30 inches long, 9 inches wide, 6 inches deep. \$2.00 each.

NASSAU WINDOW BOX

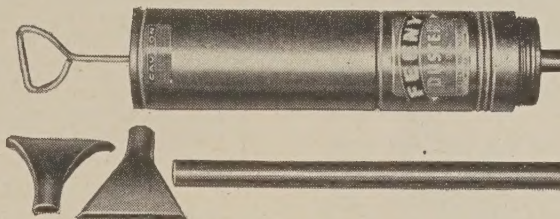
Made of Tin, Painted Green.

Size 15 in.	.....\$0.90
Size 18 in.	.....1.00
Size 24 in.	.....1.25
Size 30 in.	.....1.50

ROYAL WINDOW BOX

Made of Heavy Galvanized Metal, Painted Green.

Size 24 in.	.....\$3.50
Size 30 in.	.....4.00
Size 36 in.	.....5.00

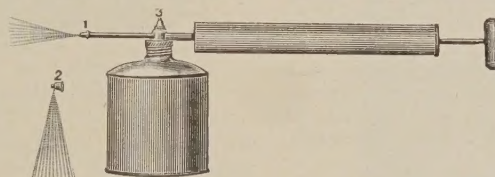


FEENY DUSTER

Model BX. A handy size for house and garden. Length 16 inches, hopper capacity 1 pint. Provided with a 12-inch extension delivery tube and flared nozzle for general use; also a special nozzle designed to throw the dust upward. Price, \$1.10.

Model F. Holds approximately 1 quart. Equipped with two 12-inch extension tubes and two nozzles. Price, \$1.75.

Model D. 50 inches long. Enables the operator to dust the under sides of low-growing plants without stooping. Holds approximately 2 quarts. Price, \$3.25.

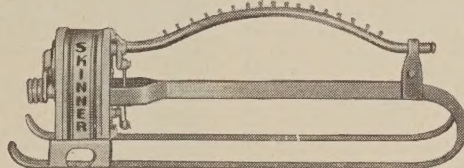


COMPRESSED AIR HAND SPRAYER

Throws a fine mist. Capacity, 1 quart. Equipped with 2 nozzles, one for spraying forward and the other to spray up underneath foliage.

No. 50T Tin	.....\$1.25
No. 50G Galvanized	.....1.65
No. 50C Copper	.....2.50

SKINNER SPRAY WAVE SPRINKLER



Economical, adjustable, oscillating sprinkler. 40'x50' coverage. Ideal, moderately priced, hose-fed sprinker. Light weight, positive action. A typical Skinner quality, precision sprinkler. Best design and workmanship and material. Capacity 6 gals. per minute. Uses ordinary water pressure. Fitted with ¾" swivel hose connecton. Price, \$22.50.

HUDSON PERFECTION SPRAYER

Open top, 4-gal. capacity.

No. 210G. Galvanized tank. \$10.50.

No. 210B. Copper tank. \$16.80.

HUDSON CLIMAX SPRAYER

Open top, 3¾-gal. capacity.

No. 235G. Galvanized tank. \$8.50.

No. 235B. Copper tank. \$13.60.

HUDSON CLIMAX JUNIOR SPRAYER

Open top, 2½-gal. capacity.

No. 241G. Galvanized tank. \$8.50.

No. 241B. Copper tank. \$13.60.



HUDSON LEADER SPRAYER

Funnel top, 3¾-gal. capacity.

No. 192G. Galvanized tank. \$7.70.

No. 191G. Galvanized tank. \$6.80.

HUDSON DU-MORE SPRAYER

Equipped with a powerful diaphragm pump. The slow easy stroke maintains a uniform high pressure. Holds 4 gallons and can be filled to capacity with every drop discharged without stopping to set it down and pump it up again. Operates with ease because of long conveniently placed handle, adjustable for length of stroke and height of operator.

No. 247GA. Galvanized tank. \$24.00.

HUDSON HAND SPRAYER

403ND. Capacity 1 quart. 60c.

303ND. Capacity 1 pint. 45c.

431. Capacity 1 quart. 90c.

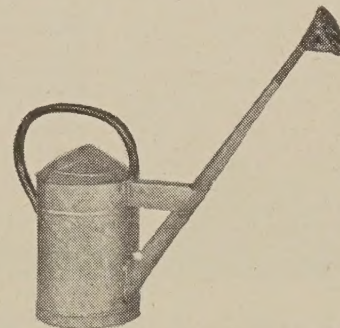
432. Capacity 1 quart. \$1.00.

435. Galvanized. Capacity 3 quarts. \$1.85.

HUDSON ADMIRAL DUSTER

No. 766. Equipped with 24-inch extension. Overall length of duster, 38 inches. Nozzles adjustable for either straight or angle discharge. \$1.40 each.

HEAVY DUTY WATERING POT



A durable heavy duty sprinkling can made of strong galvanized iron. Heavy copper handle formed for ease in carrying and pouring. Extra long spout strongly supported. Equipped with two detachable copper sprinkling heads, Coarse and fine. Capacity 12 quarts. Price, \$9.00.

Price, \$9.00.

"OUR SEEDS GROW FRIENDS"

There can be no reserves of FRESH vegetables, excepting those growing in gardens. The abundant supply to which we have become accustomed, could be changed to a shortage.

FRESH VEGETABLES play a vital part in combating malnutrition and supply the necessary vitamins for the added energy we all must have.

McCullough's Seeds have been on the market for over one hundred years. We pride ourselves on this reputation. We spend a great deal of time, effort and labor to supply seeds and gardening supplies that are, to the best of our knowledge, of the highest quality. We have often been asked if we "guarantee or warrant our seeds." We answer that we can not, for the reason that practical experience has assured us that there are many hazards beyond the control of the seedsman, such as weather conditions, insects, and difference in soil. Many times we have observed a planting of the best of seeds to fail; and, later a planting from the same lot of seeds, result in an excellent crop.

Many of our customers have not forgotten the scarcity of food during the past few years. Through necessity they planted gardens for their own use and have learned to enjoy fresh vegetables and beautiful flowers from their gardens—besides learning the benefits derived from producing something with their own hands. In the days ahead, there is a definite place in the American home life for the family garden. It is primarily a real source of pleasure as well as security.

We all are still living in a very uncertain post-war period. Transportation is not as it should be. Therefore, we urge you to place your orders as early as possible so we can give you the kind of service we know you want. We promise our full co-operation.

Seeds by Mail, etc.

Lawn Grass Seed, Vegetable and Flower Seeds will be forwarded postpaid at catalog prices. All other items are priced F.O.B. Cincinnati.

MATURITY DATES: Following most varieties of vegetables is a numeral which represents days required to produce vegetables ready for table use. Weather conditions, time of planting, etc., affect the time of maturity, and these figures will vary from year to year. These figures are intended primarily to afford a basis of comparison rather than to state a rigid interval between the planting and harvesting.

Suggestions For Ordering

In pricing the items in this catalog, we have been required to anticipate such problems as difficulties in securing certain lines of merchandise due to possible new taxes on some articles that would raise their prices—seed shortages—and other situations.

It will be our purpose to fill your orders completely, promptly and at the prices quoted in this catalog. However, if circumstances prevent this, it may be necessary on some items to delay your order, substitute, or ask for a higher price. We recommend that your orders be placed as early as possible.

Price Changes

We reserve the right to advance or decline with the market when necessary within the law on any item listed in this catalog.

The J. Chas. McCullough Seed Co. give no warranty, expressed or implied, as to the productiveness of any seeds, bulbs, or plants we sell, and will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price paid. **CONDITIONS OF ACCEPTANCE:**—All contracts, sales, bookings and agreements are subject to acceptance at our Cincinnati Office and are contingent upon war, strikes, riots, accidents, fires, floods, shortages and other conditions beyond our control. Any change in freight or insurance rates affecting any contract will be for the purchaser's account.

THE J. CHAS. McCULLOUGH SEED CO.

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1515 MARIGOLD, RED HEAD

2-inch single flowers opening rich mahogany, changing to auburn and later to bronze and gold, on sturdy stems. **Pkt., 25c.** See page 22.



1501 COSMOS, RADIANCE

Striking deep rose and rich crimson. Long, strong stems. **Pkt., 35c.** See page 22.



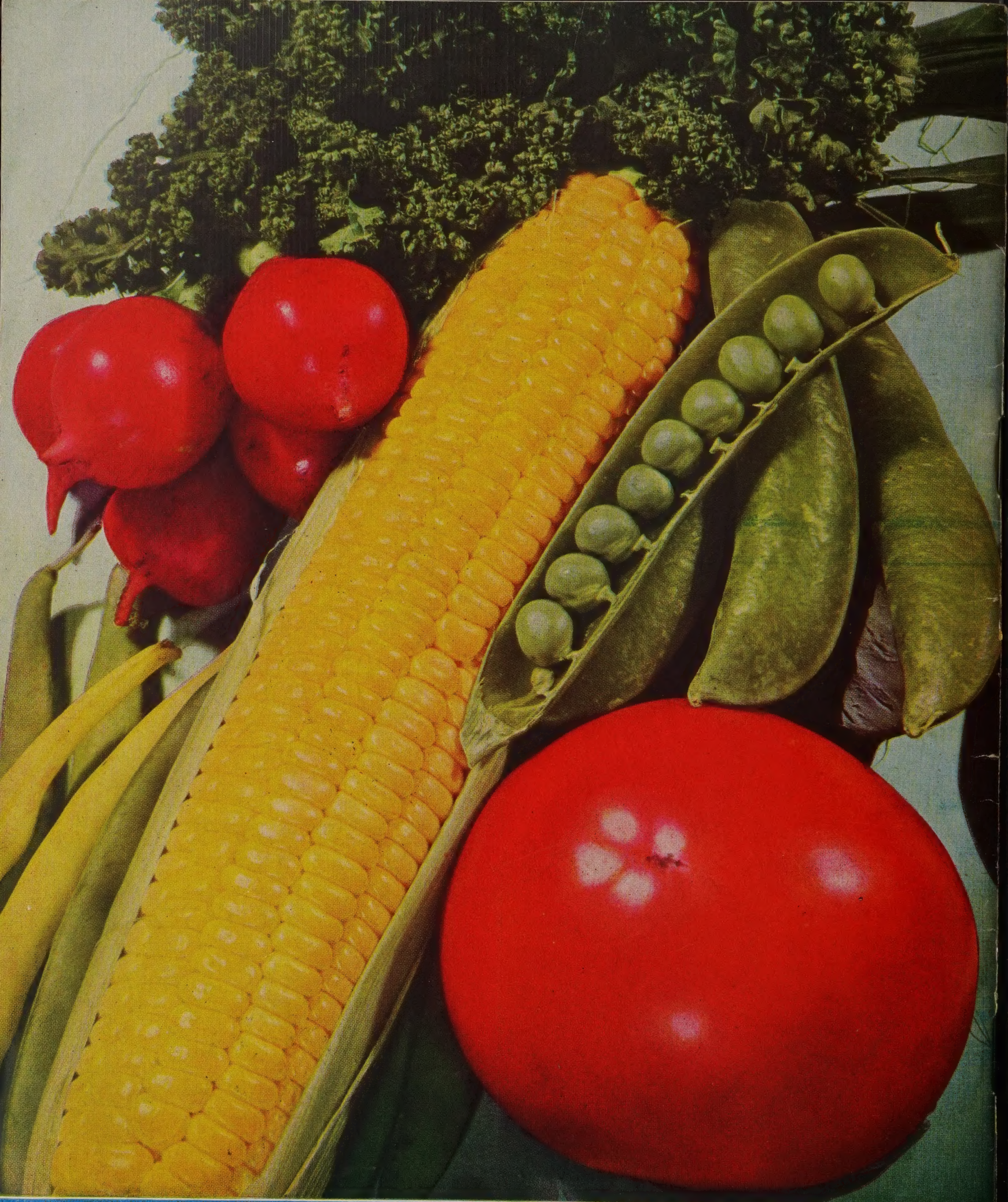
1519 NICOTIANA, DAYLIGHT

White blooms remaining open in the most brilliant sunshine. Fragrant. **Pkt., 25c.** See page 23.



1505 PETUNIA, PINK SENSATION

Rose-pink with deeper veining. Plants vigorous and very compact. **Pkt., 50c.** See page 22.



The J. Chas. McCullough Seed Co.
Phone PARKway 2600
230 E. FOURTH ST. CINCINNATI, OHIO